

Department of Transportation
Federal Highway Administration
Central Federal Lands Highway Division

ND PRA THRO 10(4)
North Unit Spot Repair
Theodore Roosevelt National Park
McKenzie County, North Dakota

INVITATION FOR BID
HUBZone Small Business Set-Aside

This invitation for bid cites Federal Highway Administration
Specifications FP-03, 2003 U.S. Customary Units

Cut & Paste on Bid Submittal Envelope

Contractor _____

Street Address _____

City/State/Zip _____

OF-17 (cflhd7/03)

FAR (48) CFR 53.214(g)

OFFER LABEL

FAR (48) CFR 53.215-1(h)

NOTICE TO OFFEROR

1. THIS LABEL MAY ONLY BE USED ON ENVELOPES
LARGER THAN 156 mm (6 ½ INCHES) IN HEIGHT AND 292
mm (11 ½ INCHES) IN LENGTH.
2. Print or type your name and address in the UPPER left corner of the
envelope containing your offer.
3. Complete the bottom portion of this form and paste it on the
lower left corner of the envelope, unless the envelope is 156 mm by
292 mm (6 ½ inches by 11 ½ inches) or smaller.

OFFER

SOLICITATION NO.

DATE FOR RECEIPT OF OFFERS

TIME FOR RECEIPT OF OFFERS

OFFICE DESIGNATED TO RECEIVE OFFERS

State: North Dakota

County: McKenzie County

Location: Theodore Roosevelt National Park

Length: Schedule A = 0.289 miles
Schedule B = 0.327 miles
Schedule C = 0.384 miles

Type of Improvement: Road reconstruction, spot repair, underdrains,
slope stabilization

This solicitation is a total HUBZone Small Business Set-aside. Offers are solicited only from HUBZone Small Business Concerns. Offers received from concerns that are not a HUBZone Small Business will be rejected.

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NOTICE TO BIDDERS AND OFFERORS

THIS SOLICITATION IS A TOTAL HUBZONE SMALL BUSINESS SET-ASIDE. OFFERS RECEIVED FROM OTHER THAN HUBZONE SMALL BUSINESS CONCERNS WILL BE REJECTED.

Before mailing your offer, please check the following:

- Your offer sets forth full, accurate, and complete information as required by this solicitation, including representations and certifications/bidders qualifications and acknowledgement of any amendments that may have been issued.
- You have completed the bid schedule and checked your bid figures, including calculations on your work sheets.
- You have provided the required minimum Bid guarantee in proper form and amount including Power of Attorney Affidavit. See FAR Provision 52.228-1.
- You have completed and signed all required documents.

INVITATION FOR BID BOOKLET

It is the responsibility of the bidder to verify that this solicitation booklet is complete as listed in the table of contents. Also, the bidder is responsible for submitting all required forms and documents with the bid.

Applicable FAR provisions and clauses in this IFB are incorporated by reference or full text. FAR provisions and clauses incorporated by reference can be accessed on the Internet at www.arnet.gov/far/. Bidders are strongly encouraged to review the provisions and clauses referenced in this document before submitting a bid.

Bidders **must** fill out and submit with their offers: (1) This page, which indicates an interest in formal Partnering and (2) Pages A-1 through D-5 of the Invitation for Bid. The remaining pages shall be retained by the bidder for their information.

PARTNERING (See Subsection 103.05 of the FP-03)

Please indicate your interest in participating in Partnering by checking the appropriate blank below.

- ☐ The offeror is interested in participating in partnering.
- ☐ The offeror is not interested in participating in partnering.

NOTICE TO BIDDERS AND OFFERORS

PERFORMANCE OF WORK REQUIREMENTS FOR HUBZONE CONTRACTS

§126.700 of the Code of Federal Regulations (Title 13, Part 126, Subpart G), states a qualified HUBZone SBC receiving a HUBZone contract for general construction must spend at least 50% of the cost of the contract incurred for personnel on its own employees or employees of other qualified HUBZone SBCs. This requirement may be met by expending at least 50% of the cost of the contract incurred for personnel on its employees or it may subcontract at least 35% of the cost of the contract performance incurred for personnel to one or more qualified HUBZone SBCs. A qualified HUBZone SBC prime contractor may not, however, subcontract more than 50% of the cost of the contract incurred for personnel to non-qualified HUBZone SBCs.

BONDING

FAR Provision 52.228-1, Bid Guarantee, requires a bid guarantee of not less than 20 percent of the amount of the bid (see page A-3). A bid bond from a corporate surety must be from a surety acceptable to the Government as appearing on the Department of the Treasury's list of approved sureties. The bid bond must have an original signature and an embossed seal for the surety. If a Power of Attorney is required with the bid bond, an original, photocopy or facsimile of an original Power of Attorney is sufficient evidence of authority to bind the surety. If the Power of Attorney form contains any language stating that the Power of Attorney can be revoked at any time, the document must contain an original signature or an embossed seal in the certification section.

Small business concerns, including minority business enterprises, may obtain assistance in securing necessary bonding for this project by contacting the office of the Small Business Administration located in their State.

ATTENTION: Minority, Women-owned, and Disadvantaged Business Enterprises (DBEs). The Department of Transportation (DOT), offers working capital financing and bonding assistance for transportation related contracts. DOT's Bonding Assistance Program (BAP) offers bid, performance and payment bonds on contracts up to \$1,000,000. DOT's Short-Term Lending Program (STLP) offers lines of credit to finance accounts receivable. Maximum line of credit is \$500,000 with interest at the prime rate. For further information, call (800) 532-1169. Internet address: <http://osdbuweb.dot.gov>.

INDIVIDUAL SURETIES

See FAR contract clause 52.228-11, Pledges of Assets.

UTILIZATION OF SMALL BUSINESS, HUBZone SMALL BUSINESS, SMALL DISADVANTAGED BUSINESS, WOMEN-OWNED SMALL BUSINESS, VETERAN OWNED, AND SERVICE-DISABLED VETERAN OWNED SMALL BUSINESS CONCERNS SUBCONTRACTING PROGRAM

FAR Clause 52.219-8, Utilization of Small Business Concerns states that Prime Contractors afford small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns,

NOTICE TO BIDDERS AND OFFERORS

and women-owned small business concerns the maximum practicable opportunity to participate in performing contracts let by any Federal agency.

PROGRESS PAYMENTS

DFARS 204.7302, NASA, DOT and Treasury FAR Supplements, requires prospective bidders be registered in Central Contractor Registration (CCR) system prior to the award of a contract, basic agreement, basic ordering agreement, or blanket purchase agreement (Refer to FAR Clause 52.204-7, Central Contractor Registration). The DOT has partnered with the Department of Defense (DOD) to use the CCR system to obtain contractor financial electronic funds transfer (EFT) information.

FAR Clause 52.232-33, Payment by Electronic Funds Transfer -- Central Contractor Registration requires that the EFT information in the CCR must be accurate in order for contractors' invoices to be considered proper invoices for the purpose of prompt payment. Contractors must input and maintain their current EFT information.

To register in CCR, access the following DOD web site: www.ccr.gov

FAR Clause 52.232-5, Payments Under Fixed-Price Construction Contracts, states reimbursement will be made for premiums paid by the Contractor to obtain performance and payment bonds as required under this contract. As specified in the Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects (FP), Section 151, Mobilization, payment for performance and payment bond premiums will be included in the mobilization item and shall not be in addition to the contract price.

FAR Clause 52.232-27, Prompt Payment for Construction Contracts, states the due date for progress payments shall be the 14th day after receipt of a proper payment request by the Government's designated billing office. Bidders are advised to review Subsection 109.08, Progress Payments and Subsection 109.05, Scope of Payment of the FP concerning direct and indirect payments.

FACSIMILE OR TELEGRAPHIC BIDS ARE NOT AUTHORIZED FOR THIS SOLICITATION.

Bids may be modified or withdrawn by facsimile or telegraphic notice, if such notice is received by the time specified for receipt of bids. The Government will not be responsible for ANY failure attributable to the transmission or receipt of telegraphic or facsimile data.

FAX Number to submit modifications to bids for this project is (701) 250-4395.

SOLICITATION, OFFER AND AWARD <i>(Construction, Alteration or Repair)</i>	1. SOLICITATION NO. DTFH68-08-B-00016	2. TYPE OF SOLICITATION <input checked="" type="checkbox"/> SEALED BID (<i>IFB</i>) <input type="checkbox"/> NEGOTIATED (<i>RFP</i>)	3. DATE ISSUED May 7, 2008	PAGE OF PAGES 1 OF 2
IMPORTANT - THE "OFFER SECTION ON THE REVERSE MUST BE FULLY COMPLETED BY OFFEROR.				
4. CONTRACT NO.	5. REQUISITION/PURCHASE REQUEST NO.	6. PROJECT NO. ND PRA THRO 10(4), North Unit Spot Repair		
7. ISSUED BY: FEDERAL HIGHWAY ADMINISTRATION CENTRAL FEDERAL LANDS DIVISION 12300 WEST DAKOTA AVENUE, SUITE 167 LAKEWOOD, COLORADO 80228		CODE: 69050001	8. ADDRESS OFFER TO: Federal Highway Administration Attn: Gary Goff 1471 Interstate Loop Bismarck, ND 58503	
9. FOR INFORMATION CALL SEE PAGE A-3	A. NAME: SEE PAGE A-3		B. TELEPHONE NO. (<i>Include area code</i>) SEE PAGE A-3	
<p style="text-align: center;"><u>SOLICITATION</u></p> <p style="text-align: center;"><i>NOTE: In sealed bid solicitations "offer" and "offeror" mean "bid" and "bidder."</i></p>				
10. THE GOVERNMENT REQUIRES PERFORMANCE OF THE WORK DESCRIBED IN THESE DOCUMENTS CONSTRUCTION OF ND PRA THRO 10(4), NORTH UNIT SPOT REPAIR, N STRICT ACCORDANCE WITH: <ol style="list-style-type: none"> 1. FEDERAL ACQUISITION AND TRANSPORTATION ACQUISITION REGULATIONS (<i>FAR & TAR</i>) 2. DEPARTMENT OF LABOR, DAVIS BACON MINIMUM WAGE RATES (<i>See Section G</i>) 3. SPECIAL CONTRACT REQUIREMENTS (<i>See Section I</i>) 4. PLANS 5. BID SCHEDULE (<i>See Section B</i>) 6. STANDARD SPECIFICATIONS FOR CONSTRUCTION OF ROADS AND BRIDGES ON FEDERAL HIGHWAY PROJECTS, FP-03, 2003 <p>See Subsection 104.04 of the FP for governing order of precedence</p> <p style="text-align: right;">*SEE BLOCK 21</p>				
11. The Contractor shall begin performance within <u>10</u> calendar days and complete it within <u>*</u> calendar days after receiving <u> </u> award <u>x</u> notice to proceed. The performance period is <u>x</u> mandatory <u> </u> negotiable.				
12A. THE CONTRACTOR MUST FURNISH ANY REQUIRED PERFORMANCE AND PAYMENT BONDS? (<i>If "YES," indicate within how many calendar days after award in Item 12B.</i>) <u>x</u> YES <u> </u> NO				12B. CALENDAR DAYS 10
13. ADDITIONAL SOLICITATION REQUIREMENTS: <p>A. Sealed offers in original and <u>0</u> copies to perform the work required are due at the place specified in Item 8. by <u>2:00 p.m.</u> local time on <u>6/10/2008</u>. If this is a sealed bid solicitation, offers will be publicly opened at that time. Sealed envelopes containing offers shall be marked to show the offeror's name and address, the solicitation number, and the date and time offers are due.</p> <p>B. An offer guarantee <u>x</u> is <u> </u> is not required.</p> <p>C. All offers are subject to the (1) work requirements and (2) other provisions and clauses incorporated in the solicitation in full text or by reference.</p> <p>D. Offers providing less than <u>60</u> calendar days for Government acceptance after the date offers are due will not be considered and will be rejected.</p>				

OFFEROR (Must be fully completed by offeror)

14. NAME AND ADDRESS OF OFFEROR (Include ZIP Code)				15. TELEPHONE NO. (Include area code)			
CODE				16. REMITTANCE ADDRESS (Include only if different than Item 14)			
				FACILITY CODE			
17. The offeror agrees to perform the work required at the prices specified below in strict accordance with the terms of this solicitation, if this offer is accepted by the Government in writing with _____ calendar days after the date offers are due. (Insert any number equal to or greater than the minimum requirement stated in Item 13D. Failure to insert any number means the offeror accepts the minimum in Item 13D.)							
AMOUNTS				SEE INDIVIDUAL BID SCHEDULE(S)			
18. The offeror agrees to furnish any required performance and payment bonds.							
19. ACKNOWLEDGMENT OF AMENDMENTS (The offeror acknowledges receipt of amendments to the solicitation - give number and date of each)							
AMENDMENT NO.							
DATE							
20A. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER (Type or print)				20B. SIGNATURE			20C. OFFER DATE
AWARD (To be completed by Government)							
21. ITEMS ACCEPTED: Schedules A & B must be completed by October 17, 2008. Schedule C must be completed by October 22, 2008.							
22. AMOUNT			23. ACCOUNTING AND APPROPRIATION DATA				
24. SUBMIT INVOICES TO ADDRESS SHOWN IN BLOCK 27 (4 copies unless otherwise specified)				25. OTHER THAN FULL AND OPEN COMPETITION PURSUANT TO <input type="checkbox"/> 15 U.S.C. 637() <input type="checkbox"/> 41 U.S.C. 253(c)()			
26. ADMINISTERED BY			CODE: _____			27. PAYMENT WILL BE MADE BY FEDERAL HIGHWAY ADMINISTRATION CENTRAL FEDERAL LANDS HIGHWAY DIVISION 12300 W. DAKOTA AVENUE, SUITE 167 LAKEWOOD, COLORADO 80228	
<u>CONTRACTING OFFICER WILL COMPLETE ITEM 28 OR 29 AS APPLICABLE</u>							
<input type="checkbox"/> 28. NEGOTIATED AGREEMENT (Contractor is required to sign this document and return _____ copies to issuing office.) Contractor agrees to furnish and deliver all items or perform all work requirements identified on this form and any continuation sheets for the consideration stated in this contract. The rights and obligations of the parties to this contract shall be governed by (a) this contract award, (b) the solicitation, and (c) the clauses, representations, certifications, and specifications incorporated by reference in or attached to this contract.				<input type="checkbox"/> 29. AWARD (Contractor is not required to sign this document.) Your offer on this solicitation is hereby accepted as to the items listed. This award consummates the contract, which consists of (a) the Government solicitation and your offer, and (b) this contract award. No further contractual document is necessary.			
30A. NAME AND TITLE OF CONTRACTOR OR PERSON AUTHORIZED TO SIGN (Type or print)				31A. NAME OF CONTRACTING OFFICER (Type or print)			
30B. SIGNATURE			30C. DATE		31B. UNITED STATES OF AMERICA BY		31C. AWARD DATE

Block 9: DATA AVAILABLE FOR REVIEW

The following materials are available electronically at www.cflhd.gov/procurement/construction/advertised-projects.cfm :

Final Geotechnical Design Report, Report # ND-PX-THRO-08-01

Earthwork Summary

The following materials are available electronically:

Manual of Uniform Traffic Control Devices for Streets and Highways, (Current Edition published by U.S. Government Printing Office found at <http://mutcd.fhwa.dot.gov> .

AASHTO Manuals found at <http://fhwapap04.fhwa.dot.gov/index.jsp> under the Standard Specifications and Supplements link.

FP-03, Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects, 2003, found at <http://www.cflhd.gov/design/index.cfm#> under the Construction Specs tab.

Contractor Guidelines for Quality Control Plans and example QC Plans found at <http://www.cflhd.gov/design/index.cfm#> under the Construction Specs tab.

For amendments, bid results and tabulations or other procurement information please visit our website at
www.cflhd.gov/procurement/construction/advertised-projects.cfm

Block 13: A bid guarantee of not less than 20 percent of the amount of the bid is required with any bid in excess of \$25,000. If the bidder fails to provide the required bid guarantee in the proper form and amount, such failure may result in rejection of the bid. See FAR Provision 52.228-1, Bid Guarantee. If the bid guarantee is a bid bond, it must be submitted on Standard Form 24. Also refer to Subsections 102.03 and 102.04 of the FP for additional information.

Block 26: The Contractor shall submit invoices to:

FHWA, CFLHD, Project Engineer's Office (Address to be designated at preconstruction conference), for submission to the designated billing office shown in Block 7.

Final billing shall be submitted directly to the address shown in Block 7.

Other: The estimated price range of the project work is between \$1,000,000 and \$3,000,000.

For questions regarding access to the Federal Business Opportunities (FBO) website or how to obtain plans and other solicitation documents, please contact either Tiffany Atchison at (720) 963-3354 or Brenda McGehee at (720) 963-3353.

As explained in FAR Provision 52.214-6, any explanation or interpretation of the solicitation, drawings, specifications, etc must be requested in writing to one of the following:

E-mail address: CFLContracts@fhwa.dot.gov
FAX Number: 720-963-3360
Mailing Address: Federal Highway Administration
Central Federal Lands Highway Division
Attention: Acquisition and Contracting
12300 W. Dakota Avenue, Suite 360
Lakewood, Colorado 80228

Responses will be provided to the individual questioner and also be posted on our website at <http://www.cflhd.gov/procurement/construction/advertised-projects.cfm> under the project link. Potential Offerors are advised to check this site on a regular basis to assure the most current and up-to-date information.

All amendments resulting from this solicitation will be uploaded to the FBO website at http://www.fbo.gov/spg/DOT/FHWA/68/postdatePrevDays_1.html and posted on our website at <http://www.cflhd.gov/procurement/construction/advertised-projects.cfm> under Current Solicitations.

**BIDDERS PLEASE BE ADVISED THAT QUESTIONS RELATIVE TO
THIS RFP WILL NOT BE ACCEPTED AFTER 2:00 P.M. Mountain Time ON June 5, 2008.**

Bid Schedule Instructions

BIDDERS, PLEASE NOTE: Before preparing the bid, carefully read the Solicitation Provisions.

This Bid Proposal is comprised of three schedules as follows:

Schedule A – 0.289 miles – Road reconstruction, spot repair, underdrains, slope stabilization.

Schedule B – 0.327 miles – Road reconstruction, spot repair, underdrains, slope stabilization.

Schedule C – 0.384 miles – Road reconstruction, spot repair, underdrains, slope stabilization.

- Insert a numeric unit price for each pay item for which there is a quantity
- When the words “Lump Sum” appear as a unit price, insert an amount for each lump sum pay item.
- Multiply the unit price by the quantity for each pay item and show the amount bid.
- Total all amounts bid for each pay item and show the Total on line provided on Page B-4 for Schedule A; Page B-9 for Schedule B; and Page B-14 for Schedule C.
- Complete the Summary Sheet on Page B-15.

Evaluation Factors for Award

To be eligible for award of a contract, the bidder shall submit prices for each item necessary to complete all contract work in Schedule A, Schedule B, and Schedule C.

Evaluation for award of a contract will consist of Schedule C. If sufficient funds are not available to award Schedule C, then Schedule B will be evaluated. If sufficient funds are not available to award Schedule B, then Schedule A will be evaluated. Accordingly, contract award will be made to the lowest responsible bidder conforming to the solicitation, provided funds are available.

All work for Schedules A & B must be completed by October 17, 2008.

All work for Schedule C must be completed by October 22, 2008.

Schedule A

ND PRA THRO 10(4)
North Unit Spot Repair

B- 1

Bid Schedule

Project: ND PRA THRO 10(4)
NORTH UNIT SPOT REPAIR

Pay Item No.	Estimated Quantity	Unit Bid Price	Amount Bid
15101-0000	MOBILIZATION		
	ALL	Lump Sum	\$_____
15215-3000	SURVEY AND STAKING, DRAINAGE STRUCTURE		
	1		
	EACH	\$_____	\$_____
15216-2000	SURVEY AND STAKING, GRADE FINISHING STAKES		
	16.00		
	STA	\$_____	\$_____
15401-0000	CONTRACTOR TESTING		
	ALL	Lump Sum	\$_____
15705-0100	SOIL EROSION CONTROL, SILT FENCE		
	2,400		
	LNFT	\$_____	\$_____
15705-1400	SOIL EROSION CONTROL, SEDIMENT LOG		
	70		
	LNFT	\$_____	\$_____
20301-2400	REMOVAL OF SIGN		
	2		
	EACH	\$_____	\$_____
20401-0000	ROADWAY EXCAVATION		
	3,800		
	CUYD	\$_____	\$_____
20403-0000	UNCLASSIFIED BORROW		
	3,450		
	CUYD	\$_____	\$_____
25101-2000	PLACED RIPRAP, CLASS 2		
	16		
	CUYD	\$_____	\$_____
25101-3000	PLACED RIPRAP, CLASS 3		
	17		
	CUYD	\$_____	\$_____

Bid Schedule A

Project: ND PRA THRO 10(4)
NORTH UNIT SPOT REPAIR

Pay Item No.	Estimated Quantity	Unit Bid Price	Amount Bid
30802-2000	ROADWAY AGGREGATE, METHOD 2		
	1,100 TON	\$ _____	\$ _____
60201-0800	24-INCH PIPE CULVERT (CONCRETE)		
	60 LNFT	\$ _____	\$ _____
60210-0800	END SECTION FOR 24-INCH PIPE CULVERT (CONCRETE)		
	2 EACH	\$ _____	\$ _____
60501-0000	STANDARD UNDERDRAIN SYSTEM		
	1,175 LNFT	\$ _____	\$ _____
60901-2300	CURB, ASPHALT, 6-INCH DEPTH		
	1,175 LNFT	\$ _____	\$ _____
61902-0000	GATE		
	1 EACH	\$ _____	\$ _____
62201-0200	DUMP TRUCK, 8 CUBIC YARD MINIMUM CAPACITY		
	20 HOUR	\$ _____	\$ _____
62201-2850	MOTOR GRADER, 12 FOOT MINIMUM BLADE		
	20 HOUR	\$ _____	\$ _____
62201-3350	HYDRAULIC EXCAVATOR, 1 CUBIC YARD MINIMUM CAPACITY		
	20 HOUR	\$ _____	\$ _____
62301-0000	GENERAL LABOR		
	40 HOUR	\$ _____	\$ _____
62302-1000	SPECIAL LABOR, HIRED TECHNICAL SERVICES		
	50 HOUR	\$ _____	\$ _____
62302-1100	SPECIAL LABOR, HIRED SURVEY SERVICES		
	60 HOUR	\$ _____	\$ _____

Bid Schedule A

Project: ND PRA THRO 10(4)
NORTH UNIT SPOT REPAIR

Pay Item No.	Estimated Quantity	Unit Bid Price	Amount Bid
62405-0300	PLACING CONSERVED TOPSOIL, 4-INCH DEPTH		
	4,000		
	SQYD	\$ _____	\$ _____
62502-0000	TURF ESTABLISHMENT		
	4,000		
	SQYD	\$ _____	\$ _____
63401-0300	PAVEMENT MARKINGS, TYPE B, SOLID		
	8,700		
	LNFT	\$ _____	\$ _____
63502-0700	TEMPORARY TRAFFIC CONTROL, CONE		
	100		
	EACH	\$ _____	\$ _____
63502-1300	TEMPORARY TRAFFIC CONTROL, DRUM		
	20		
	EACH	\$ _____	\$ _____
63504-1000	TEMPORARY TRAFFIC CONTROL, CONSTRUCTION SIGN		
	200		
	SQFT	\$ _____	\$ _____
63506-0500	TEMPORARY TRAFFIC CONTROL, FLAGGER		
	350		
	HOUR	\$ _____	\$ _____
15206-0000	SLOPE, REFERENCE, AND CLEARING AND GRUBBING STAKE		
	8.00		
	STA	\$ _____	\$ _____
20104-0000	CLEARING		
	1.0		
	ACRE	\$ _____	\$ _____
20302-2100	REMOVAL OF PIPE CULVERT		
	65		
	LNFT	\$ _____	\$ _____
40401-0000	MINOR HOT ASPHALT CONCRETE		
	475		
	TON	\$ _____	\$ _____

Bid Schedule A

Project: ND PRA THRO 10(4)
NORTH UNIT SPOT REPAIR

Pay Item No.	Estimated Quantity	Unit Bid Price	Amount Bid
63506-0600	TEMPORARY TRAFFIC CONTROL, PILOT CAR		
	175		
	HOUR	\$ _____	\$ _____
20420-0000	EMBANKMENT CONSTRUCTION		
	800		
	CUYD	\$ _____	\$ _____
15501-0000	CONSTRUCTION SCHEDULE		
	ALL	Lump Sum	\$ _____
60908-1000	PAVED DITCH, ASPHALT		
	410		
	SQYD	\$ _____	\$ _____
40920-1000	FOG SEAL, EMULSIFIED ASPHALT GRADE CSS-1 OR CSS-1H, SS-1 OR SS-1H		
	10		
	TON	\$ _____	\$ _____
20703-2000	GEOGRID, BIAXIAL		
	7,550		
	SQYD	\$ _____	\$ _____
63501-2000	TEMPORARY TRAFFIC CONTROL, TRAFFIC SIGNAL SYSTEM		
	ALL	Lump Sum	\$ _____
63503-0400	TEMPORARY TRAFFIC CONTROL, CONCRETE BARRIER		
	1,000		
	LNFT	\$ _____	\$ _____

TOTAL \$ _____

Submitted by: _____
Name of Bidder

Bid Schedule A

Project: ND PRA THRO 10(4)
 NORTH UNIT SPOT REPAIR

Schedule B

ND PRA THRO 10(4)
North Unit Spot Repair

Bid Schedule

Project: ND PRA THRO 10(4)
NORTH UNIT SPOT REPAIR

Pay Item No.	Estimated Quantity	Unit Bid Price	Amount Bid
15101-0000	MOBILIZATION		
	ALL	Lump Sum	\$ _____
15215-3000	SURVEY AND STAKING, DRAINAGE STRUCTURE		
	1		
	EACH	\$ _____	\$ _____
15216-2000	SURVEY AND STAKING, GRADE FINISHING STAKES		
	20.00		
	STA	\$ _____	\$ _____
15401-0000	CONTRACTOR TESTING		
	ALL	Lump Sum	\$ _____
15705-0100	SOIL EROSION CONTROL, SILT FENCE		
	2,600		
	LNFT	\$ _____	\$ _____
15705-1400	SOIL EROSION CONTROL, SEDIMENT LOG		
	100		
	LNFT	\$ _____	\$ _____
20301-2400	REMOVAL OF SIGN		
	4		
	EACH	\$ _____	\$ _____
20401-0000	ROADWAY EXCAVATION		
	5,300		
	CUYD	\$ _____	\$ _____
20403-0000	UNCLASSIFIED BORROW		
	4,900		
	CUYD	\$ _____	\$ _____
20703-1000	GEOGRID, UNIAXIAL		
	2,075		
	SQYD	\$ _____	\$ _____
25101-2000	PLACED RIPRAP, CLASS 2		
	17		
	CUYD	\$ _____	\$ _____

Bid Schedule B

Project: ND PRA THRO 10(4)
NORTH UNIT SPOT REPAIR

Pay Item No.	Estimated Quantity	Unit Bid Price	Amount Bid
25101-3000	PLACED RIPRAP, CLASS 3		
	17		
	CUYD	\$ _____	\$ _____
30802-2000	ROADWAY AGGREGATE, METHOD 2		
	1,380		
	TON	\$ _____	\$ _____
60201-0800	24-INCH PIPE CULVERT (CONCRETE)		
	60		
	LNFT	\$ _____	\$ _____
60210-0800	END SECTION FOR 24-INCH PIPE CULVERT (CONCRETE)		
	2		
	EACH	\$ _____	\$ _____
60501-0000	STANDARD UNDERDRAIN SYSTEM		
	1,175		
	LNFT	\$ _____	\$ _____
60901-2300	CURB, ASPHALT, 6-INCH DEPTH		
	1,325		
	LNFT	\$ _____	\$ _____
61702-0600	TERMINAL SECTION, TYPE FLARED		
	4		
	EACH	\$ _____	\$ _____
61902-0000	GATE		
	1		
	EACH	\$ _____	\$ _____
62201-0200	DUMP TRUCK, 8 CUBIC YARD MINIMUM CAPACITY		
	40		
	HOUR	\$ _____	\$ _____
62201-2850	MOTOR GRADER, 12 FOOT MINIMUM BLADE		
	40		
	HOUR	\$ _____	\$ _____
62201-3350	HYDRAULIC EXCAVATOR, 1 CUBIC YARD MINIMUM CAPACITY		
	50		
	HOUR	\$ _____	\$ _____
62301-0000	GENERAL LABOR		
	80		
	HOUR	\$ _____	\$ _____

Bid Schedule B

Project: ND PRA THRO 10(4)
NORTH UNIT SPOT REPAIR

Pay Item No.	Estimated Quantity	Unit Bid Price	Amount Bid
62302-1000	SPECIAL LABOR, HIRED TECHNICAL SERVICES		
	90		
	HOUR	\$ _____	\$ _____
62302-1100	SPECIAL LABOR, HIRED SURVEY SERVICES		
	100		
	HOUR	\$ _____	\$ _____
62405-0300	PLACING CONSERVED TOPSOIL, 4-INCH DEPTH		
	4,400		
	SQYD	\$ _____	\$ _____
62502-0000	TURF ESTABLISHMENT		
	4,400		
	SQYD	\$ _____	\$ _____
63301-0000	SIGN SYSTEM		
	2		
	EACH	\$ _____	\$ _____
63401-0300	PAVEMENT MARKINGS, TYPE B, SOLID		
	10,350		
	LNFT	\$ _____	\$ _____
63502-0700	TEMPORARY TRAFFIC CONTROL, CONE		
	125		
	EACH	\$ _____	\$ _____
63502-1300	TEMPORARY TRAFFIC CONTROL, DRUM		
	25		
	EACH	\$ _____	\$ _____
63504-1000	TEMPORARY TRAFFIC CONTROL, CONSTRUCTION SIGN		
	200		
	SQFT	\$ _____	\$ _____
63506-0500	TEMPORARY TRAFFIC CONTROL, FLAGGER		
	400		
	HOUR	\$ _____	\$ _____
62901-1100	ROLLED EROSION CONTROL PRODUCT, TYPE 4		
	425		
	SQYD	\$ _____	\$ _____
15206-0000	SLOPE, REFERENCE, AND CLEARING AND GRUBBING STAKE		
	10.00		
	STA	\$ _____	\$ _____

Bid Schedule B

Project: ND PRA THRO 10(4)
NORTH UNIT SPOT REPAIR

Pay Item No.	Estimated Quantity	Unit Bid Price	Amount Bid
20104-0000	CLEARING		
	1.5 ACRE	\$ _____	\$ _____
20302-2100	REMOVAL OF PIPE CULVERT		
	65 LNFT	\$ _____	\$ _____
20703-2000	GEOGRID, BIAXIAL		
	8,125 SQYD	\$ _____	\$ _____
40401-0000	MINOR HOT ASPHALT CONCRETE		
	590 TON	\$ _____	\$ _____
63506-0600	TEMPORARY TRAFFIC CONTROL, PILOT CAR		
	175 HOUR	\$ _____	\$ _____
20420-0000	EMBANKMENT CONSTRUCTION		
	800 CUYD	\$ _____	\$ _____
15501-0000	CONSTRUCTION SCHEDULE		
	ALL	Lump Sum	\$ _____
61701-2000	GUARDRAIL SYSTEM G4, TYPE 4, CLASS B WOOD POSTS		
	625 LNFT	\$ _____	\$ _____
60908-1000	PAVED DITCH, ASPHALT		
	525 SQYD	\$ _____	\$ _____
40920-1000	FOG SEAL, EMULSIFIED ASPHALT GRADE CSS-1 OR CSS-1H, SS-1 OR SS-1H		
	12 TON	\$ _____	\$ _____
63501-2000	TEMPORARY TRAFFIC CONTROL, TRAFFIC SIGNAL SYSTEM		
	ALL	Lump Sum	\$ _____

Bid Schedule B

Project: ND PRA THRO 10(4)
NORTH UNIT SPOT REPAIR

Pay Item No.	Estimated Quantity	Unit Bid Price	Amount Bid
63503-0400	TEMPORARY TRAFFIC CONTROL, CONCRETE BARRIER		
	1,000		
	LNFT	\$_____	\$_____

TOTAL \$_____

Submitted by: _____
Name of Bidder

Schedule C

ND PRA THRO 10(4)
North Unit Spot Repair

Bid Schedule

Project: PRA THRO 10(4)
NORTH UNIT SPOT REPAIR

Pay Item No.	Estimated Quantity	Unit Bid Price	Amount Bid
15101-0000	MOBILIZATION		
	ALL	Lump Sum	\$ _____
15215-3000	SURVEY AND STAKING, DRAINAGE STRUCTURE		
	1		
	EACH	\$ _____	\$ _____
15216-2000	SURVEY AND STAKING, GRADE FINISHING STAKES		
	26.00		
	STA	\$ _____	\$ _____
15401-0000	CONTRACTOR TESTING		
	ALL	Lump Sum	\$ _____
15705-0100	SOIL EROSION CONTROL, SILT FENCE		
	2,900		
	LNFT	\$ _____	\$ _____
15705-1400	SOIL EROSION CONTROL, SEDIMENT LOG		
	100		
	LNFT	\$ _____	\$ _____
20301-2400	REMOVAL OF SIGN		
	4		
	EACH	\$ _____	\$ _____
20401-0000	ROADWAY EXCAVATION		
	6,400		
	CUYD	\$ _____	\$ _____
20403-0000	UNCLASSIFIED BORROW		
	5,950		
	CUYD	\$ _____	\$ _____
20703-1000	GEOGRID, UNIAXIAL		
	3,550		
	SQYD	\$ _____	\$ _____
25101-2000	PLACED RIPRAP, CLASS 2		
	17		
	CUYD	\$ _____	\$ _____

Bid Schedule C

Project: PRA THRO 10(4)
NORTH UNIT SPOT REPAIR

Pay Item No.	Estimated Quantity	Unit Bid Price	Amount Bid
25101-3000	PLACED RIPRAP, CLASS 3		
	17 CUYD	\$ _____	\$ _____
30802-2000	ROADWAY AGGREGATE, METHOD 2		
	1,725 TON	\$ _____	\$ _____
60201-0800	24-INCH PIPE CULVERT (CONCRETE)		
	60 LNFT	\$ _____	\$ _____
60210-0800	END SECTION FOR 24-INCH PIPE CULVERT (CONCRETE)		
	2 EACH	\$ _____	\$ _____
60501-0000	STANDARD UNDERDRAIN SYSTEM		
	1,175 LNFT	\$ _____	\$ _____
60901-2300	CURB, ASPHALT, 6-INCH DEPTH		
	1,325 LNFT	\$ _____	\$ _____
61702-0600	TERMINAL SECTION, TYPE FLARED		
	4 EACH	\$ _____	\$ _____
61902-0000	GATE		
	1 EACH	\$ _____	\$ _____
62201-0200	DUMP TRUCK, 8 CUBIC YARD MINIMUM CAPACITY		
	60 HOUR	\$ _____	\$ _____
62201-2850	MOTOR GRADER, 12 FOOT MINIMUM BLADE		
	60 HOUR	\$ _____	\$ _____
62201-3350	HYDRAULIC EXCAVATOR, 1 CUBIC YARD MINIMUM CAPACITY		
	80 HOUR	\$ _____	\$ _____
62301-0000	GENERAL LABOR		
	120 HOUR	\$ _____	\$ _____

Bid Schedule C

Project: PRA THRO 10(4)
NORTH UNIT SPOT REPAIR

Pay Item No.	Estimated Quantity	Unit Bid Price	Amount Bid
62302-1000	SPECIAL LABOR, HIRED TECHNICAL SERVICES		
	130		
	HOUR	\$ _____	\$ _____
62302-1100	SPECIAL LABOR, HIRED SURVEY SERVICES		
	140		
	HOUR	\$ _____	\$ _____
62405-0300	PLACING CONSERVED TOPSOIL, 4-INCH DEPTH		
	5,150		
	SQYD	\$ _____	\$ _____
62502-0000	TURF ESTABLISHMENT		
	5,150		
	SQYD	\$ _____	\$ _____
63301-0000	SIGN SYSTEM		
	2		
	EACH	\$ _____	\$ _____
63401-0300	PAVEMENT MARKINGS, TYPE B, SOLID		
	12,850		
	LNFT	\$ _____	\$ _____
63502-0700	TEMPORARY TRAFFIC CONTROL, CONE		
	150		
	EACH	\$ _____	\$ _____
63502-1300	TEMPORARY TRAFFIC CONTROL, DRUM		
	30		
	EACH	\$ _____	\$ _____
63504-1000	TEMPORARY TRAFFIC CONTROL, CONSTRUCTION SIGN		
	225		
	SQFT	\$ _____	\$ _____
63506-0500	TEMPORARY TRAFFIC CONTROL, FLAGGER		
	450		
	HOUR	\$ _____	\$ _____
62901-1100	ROLLED EROSION CONTROL PRODUCT, TYPE 4		
	1,100		
	SQYD	\$ _____	\$ _____
15206-0000	SLOPE, REFERENCE, AND CLEARING AND GRUBBING STAKE		
	13.00		
	STA	\$ _____	\$ _____

Bid Schedule C

Project: PRA THRO 10(4)
NORTH UNIT SPOT REPAIR

Pay Item No.	Estimated Quantity	Unit Bid Price	Amount Bid
20104-0000	CLEARING		
	2.0		
	ACRE	\$ _____	\$ _____
20302-2100	REMOVAL OF PIPE CULVERT		
	65		
	LNFT	\$ _____	\$ _____
20703-2000	GEOGRID, BIAXIAL		
	8,500		
	SQYD	\$ _____	\$ _____
40401-0000	MINOR HOT ASPHALT CONCRETE		
	750		
	TON	\$ _____	\$ _____
63506-0600	TEMPORARY TRAFFIC CONTROL, PILOT CAR		
	175		
	HOUR	\$ _____	\$ _____
63316-1000	REMOVE AND RESET SIGN		
	1		
	EACH	\$ _____	\$ _____
15501-0000	CONSTRUCTION SCHEDULE		
	ALL	Lump Sum	\$ _____
20420-0000	EMBANKMENT CONSTRUCTION		
	800		
	CUYD	\$ _____	\$ _____
61701-2000	GUARDRAIL SYSTEM G4, TYPE 4, CLASS B WOOD POSTS		
	625		
	LNFT	\$ _____	\$ _____
60908-1000	PAVED DITCH, ASPHALT		
	525		
	SQYD	\$ _____	\$ _____
40920-1000	FOG SEAL, EMULSIFIED ASPHALT GRADE CSS-1 OR CSS-1H, SS-1 OR SS-1H		
	15		
	TON	\$ _____	\$ _____
63501-2000	TEMPORARY TRAFFIC CONTROL, TRAFFIC SIGNAL SYSTEM		
	ALL	Lump Sum	\$ _____

Bid Schedule C

Project: PRA THRO 10(4)
NORTH UNIT SPOT REPAIR

Pay Item No.	Estimated Quantity	Unit Bid Price	Amount Bid
63503-0400	TEMPORARY TRAFFIC CONTROL, CONCRETE BARRIER		
	1,000		
	LNFT	\$_____	\$_____

TOTAL \$_____

Submitted by: _____
Name of Bidder

BID SUMMARY FOR
ND PRA THRO 10(4)
NORTH UNIT SPOT REPAIR

Schedule A \$ _____

Schedule B \$ _____

Schedule C \$ _____

Continuation of Bid Schedule**BUY AMERICAN ACT - CONSTRUCTION MATERIALS
UNDER TRADE AGREEMENTS**

It is understood and agreed that the materials and components listed in Subpart 25.1 of the Federal Acquisition Regulations are a part of this contract and are deemed to be Domestic Construction Material for the purposes of this contract.

Note to Contractor:

The following information and any applicable supporting data is required for evaluation of requests under FAR Clause 52.225-9 Paragraph (c) and (d) and FAR Provision 52.225-10 Paragraph (b).

Material and/or Component

Construction Material Description	Unit of Measure	Quantity	*Cost Delivered to Job Site
Foreign Construction Material			
Comparable Domestic Material			

Material and/or Component

Construction Material Description	Unit of Measure	Quantity	*Cost Delivered to Job Site
Foreign Construction Material			
Comparable Domestic Material			

[Include all delivery costs to the construction site and any applicable duty (whether or not a duty-free entry certificate is issued).]
[Please include name, address, telephone number and contact for suppliers surveyed. Attach copy of response; if oral, attach summary.
Include all applicable supporting information.]*

HAZARDOUS MATERIALS

As required by FAR Clause 52.223-3, Hazardous Materials Identification and Safety Data - Alternate I, the apparent low bidder must submit prior to award a Material Safety Data Sheet (MSDS) for all hazardous materials that the bidder identifies in paragraph (b) of the FAR clause and defined under the latest version of Federal Standard No. 313.

Hazardous Material	Identification Number

USE OF RECOVERED MATERIALS ON FEDERAL LANDS HIGHWAY PROJECTS

Use of fly ash and ground granulated blast furnace slag and construction materials containing fly ash and ground granulated blast furnace slag on Federal Lands Highway projects:

- It is the policy of the United States Government that fly ash and ground granulated blast furnace slag and materials containing fly ash and ground granulated blast furnace slag shall have maximum practicable opportunity for incorporation into its construction projects.
- The Contractor agrees to investigate the use of fly ash and ground granulated blast furnace slag and materials containing fly ash and ground granulated blast furnace slag to the fullest extent consistent with the efficient performance of this contract. Both the contractor and the subcontractors are urged to seek out suppliers of fly ash and ground granulated blast furnace slag, cement and concrete containing fly ash and ground granulated blast furnace slag and to solicit bids for these materials.
- Names of firms that supply fly ash and ground granulated blast furnace slag and materials containing fly ash and ground granulated blast furnace slag are available from the American Coal Ash Association and the National Slag Association.

BID BOND (See instructions on reverse)				DATE BOND EXECUTED (Must not be later than bid opening date)				OMB NO. 9000-0045	
Public reporting burden for this collection of information is estimated to average 25 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the FAR Secretariat (MVR), Federal Acquisition Policy Division, GSA, Washington, D.C. 20405.									
PRINCIPAL (Legal name and business address)						TYPE OF ORGANIZATION (aX@ one) <input type="checkbox"/> INDIVIDUAL <input type="checkbox"/> PARTNERSHIP <input type="checkbox"/> JOINT VENTURE <input type="checkbox"/> CORPORATION			
						STATE OF INCORPORATION			
SURETY(IES) (Name and business address)									
PENAL SUM OF BOND					BID IDENTIFICATION				
PERCENT OF BID PRICE	AMOUNT NOT TO EXCEED				BID DATE	INVITATION NO.			
	20 PERCENT	MILLION(S)	THOUSAND(S)	HUNDRED(S)	CENTS	FOR (Construction, Supplies or Services)	CONSTRUCTION		
ND PRA THRO 10(4)									
OBLIGATION: We, the Principal and Surety(ies) are firmly bound to the United States of America (hereinafter called the Government) in the above penal sum. For payment of the penal sum, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally. However, where the Sureties are corporations acting as co-sureties, we, the Sureties, bind ourselves in such sum "jointly and severally" as well as "severally" only for the purpose of allowing a joint action or actions against any or all of us. For all other purposes, each Surety binds itself, jointly and severally with the Principal, for the payment of the sum shown opposite the name of the Surety. If no limit of liability is indicated, the limit of liability is the full amount of the penal sum.									
CONDITIONS: The Principal has submitted the bid identified above.									
THEREFORE: The above obligation is void if the Principal - (a) upon acceptance by the Government of the bid identified above, within the period specified therein for acceptance (sixty (60) days if no period is specified), executes the further contractual documents and gives the bond(s) required by the terms of the bid as accepted within the time specified (ten (10) days if no period is specified) after receipt of the forms by the principal; or (b) in the event of failure to execute such further contractual documents and give such bonds, pays the Government for any cost of procuring the work which exceeds the amount of the bid.									
Each Surety executing this instrument agrees that its obligation is not impaired by any extension(s) of time for acceptance of the bid that the Principal may grant to the Government. Notice to the surety(ies) of extension(s) are waived. However, waiver of the notice applies only to extensions aggregating not more than sixty (60) calendar days in addition to the period originally allowed for acceptance of the bid.									
WITNESS: The Principal and Surety(ies) executed this bid bond and affixed their seals on the above date.									
PRINCIPAL									
SIGNATURE(S)	1. (Seal)		2. (Seal)		3. (Seal)		Corporate Seal		
NAMES(S) & TITLE(S) (Typed)	1.		2.		3.				
INDIVIDUAL SURETY(IES)									
SIGNATURE(S)	1. (Seal)				2. (Seal)				
NAMES(S) (Typed)	1.				2.				
CORPORATE SURETY(IES)									
SURETY A	NAME & ADDRESS				STATE OF INC.		LIABILITY LIMIT \$		Corporate Seal
	SIGNATURE(S)	1.			2.				
	NAMES(S) & TITLE(S) (Typed)	1.			2.				

SURETY B	NAME & ADDRESS			STATE OF INC.	LIABILITY LIMIT \$	Corporate Seal
	SIGNATURE(S)	1.		2.		
	NAMES(S) & TITLE(S) (Typed)	1.		2.		
SURETY C	NAME & ADDRESS			STATE OF INC.	LIABILITY LIMIT \$	Corporate Seal
	SIGNATURE(S)	1.		2.		
	NAMES(S) & TITLE(S) (Typed)	1.		2.		
SURETY D	NAME & ADDRESS			STATE OF INC.	LIABILITY LIMIT \$	Corporate Seal
	SIGNATURE(S)	1.		2.		
	NAMES(S) & TITLE(S) (Typed)	1.		2.		
SURETY E	NAME & ADDRESS			STATE OF INC.	LIABILITY LIMIT \$	Corporate Seal
	SIGNATURE(S)	1.		2.		
	NAMES(S) & TITLE(S) (Typed)	1.		2.		
SURETY F	NAME & ADDRESS			STATE OF INC.	LIABILITY LIMIT \$	Corporate Seal
	SIGNATURE(S)	1.		2.		
	NAMES(S) & TITLE(S) (Typed)	1.		2.		
SURETY G	NAME & ADDRESS			STATE OF INC.	LIABILITY LIMIT \$	Corporate Seal
	SIGNATURE(S)	1.		2.		
	NAMES(S) & TITLE(S) (Typed)	1.		2.		

INSTRUCTIONS

1. This form is authorized for use when a bid guaranty is required. Any deviation from this form will require the written approval of the Administrator of General Services.
2. Insert the full legal name and business address of the Principal in the space designated "Principal" on the face of the form. An authorized person shall sign the bond. Any person signing in a representative capacity (e.g., an attorney-in-fact) must furnish evidence of authority if that representative is not a member of the firm, partnership, or joint venture, or an officer of the corporation involved.
3. The bond may express penal sum as a percentage of the bid price. In these cases, the bond may state a maximum dollar limitation (e.g., 20% of the bid price but the amount not to exceed _____ dollars).
4. (a) Corporations executing the bond as sureties must appear on the Department of the Treasury's list of approved sureties and must act within the limitation listed therein. Where more than one corporate surety is involved, their names and addresses shall appear in the spaces (Surety A, Surety B, etc.) headed "CORPORATE SURETY(IES)." In the space designated "SURETY(IES)" on the face of the form, insert only the letter identification of the sureties.
(b) Where individual sureties are involved, a completed Affidavit of Individual Surety (Standard Form 28), for each individual surety, shall accompany the bond. The Government may require the surety to furnish additional substantiating information concerning its financial capacity.
5. Corporations executing the bond shall affix their corporate seals. Individuals shall execute the bond opposite the word "Corporate Seal"; and shall affix an adhesive seal if executed in Maine, New Hampshire, or any other jurisdiction requiring adhesive seals.
6. Type the name and title of each person signing this bond in the space provided.
7. In its application to negotiated contracts, the terms "bid" and "bidder" shall include "proposal" and "offeror."

FEDERAL ACQUISITION REGULATION
SOLICITATION PROVISIONS

REPRESENTATIONS AND CERTIFICATIONS

Effective January 2005, offerors/bidders must submit Representations and Certifications online at www.bpn.gov. All offerors/bidders should submit/update this information at least annually. Refer to the Federal Acquisition Provision 52.204-8 *Annual Representations and Certifications* below. If you have previously accomplished your on-line registration and the NAICS code for this solicitation is different than the code listed in your online profile, please note the amended changes on the lines provided in the Provision below.

REFER TO CFLHD'S WEBSITE AT <http://www.cflhd.gov/procurement/construction/reference-links.cfm> FOR ON-LINE REGISTRATION INSTRUCTIONS

52.204-8 ANNUAL REPRESENTATIONS AND CERTIFICATIONS (JAN 2006)

- (a) (1) The North American Industry Classification System (NAICS) code for this acquisition is 237310.
 (2) The small business size standard is 31.0 million or fewer.
 (3) The small business size standard for a concern which submits an offer in its own name, other than on a construction or service contract, but which proposes to furnish a product which it did not itself manufacture, is 500 employees.

- (b) (1) If the clause at 52.204-7, Central Contractor Registration, is included in this solicitation, paragraph (c) of this provision applies.

(2) If the clause at 52.204-7 is not included in this solicitation, and the offeror is currently registered in CCR, and has completed the ORCA electronically, the offeror may choose to use paragraph (c) instead of completing the corresponding individual representations and certifications in the solicitation. The offeror shall indicate which option applies by checking one of the following boxes:

☐ (i) Paragraph (c) applies.

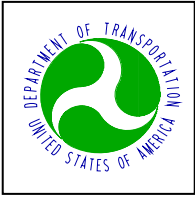
☐ (ii) Paragraph (c) does not apply and the offeror has completed the individual representations and certifications in the solicitation.

(c) The offeror has completed the annual representations and certifications electronically via the Online Representations and Certifications Application (ORCA) website at <http://orca.bpn.gov>. After reviewing the ORCA database information, the offeror verifies by submission of the offer that the representations and certifications currently posted electronically have been entered or updated within the last 12 months, are current, accurate, complete, and applicable to this solicitation (including the business size standard applicable to the NAICS code referenced for this solicitation), as of the date of this offer and are incorporated in this offer by reference (see FAR 4.1201); except for the changes identified below [*offeror to insert changes, identifying change by clause number, title, date*]. These amended representation(s) and/or certification(s) are also incorporated in this offer and are current, accurate, and complete as of the date of this offer.

FAR CLAUSE	TITLE	DATE	CHANGE
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Any changes provided by the offeror are applicable to this solicitation only, and do not result in an update to the representations and certifications posted on ORCA.

(End of Provision)



FEDERAL HIGHWAY ADMINISTRATION
CENTRAL FEDERAL LANDS HIGHWAY DIVISION

BIDDER'S QUALIFICATIONS

INSTRUCTIONS: Answer all questions on this form inserting "none" or "not applicable" where appropriate. If more space is required attach additional sheets. Return the signed, dated and completed form with the bid to the address shown in the invitation for bids on or before the time set for bid opening. The prospective bidder shall provide any additional information requested by the Government during evaluation of the bids.

If the prospective bidder is a joint venture or general partnership, a separate Bidder's Qualifications form shall be provided individually for each joint venture participant or partner.

1. Name and address of business

Name

DUNS Number (See FAR Provision 52.204-6)*

Street

Home Office Congressional District (Insert District #) *

City State Zip Code

* Necessary for Government reporting purposes

County

Telephone Number (Include Area Code)

Fax Number (Include Area Code)

2. a. Type of organization (check appropriate box):

☐ Individual

☐ Non-profit organization

☐ Corporation

☐ Partnership

☐ Joint Venture

☐ Incorporated in: _____

If a Foreign entity:

☐ Individual

☐ Non-profit organization

☐ Corporation

☐ Partnership

☐ Joint Venture

☐ Registered in: _____

b. Size and type of Business Concern (check appropriate boxes):

☐ Large Business Concern

☐ Small Disadvantaged Business Concern

☐ Emerging Small Business

☐ Small Business Concern

☐ Women-Owned Small Business

☐ SBA 8(a) Certified

☐ HUB Zone Business Concern

☐ Veteran Owned Business Concern

☐ Service-Disabled Veteran-Owned Business Concern

3. If a joint venture or general partnership:

- a. Provide the name under which the project will be bid, the home office address, and name of the principal who will represent the company with regard to this project if different from "1." above.

Principal _____

Business Name _____

Street _____

City _____ State _____ Zip Code _____

- b. Provide the name and home office addresses of each of the joint venture partners; indicate which partner is the sponsoring partner. Attach a separate sheet for additional partners.

Sponsoring Partner _____

Other Partner _____

Street _____

Street _____

City _____ State _____ Zip Code _____

City _____ State _____ Zip Code _____

4. Date organization established: _____

5. Name of succeeded business, if any: _____

6. How many years have you been in business as:

- a. General contractor ____ years.
b. Subcontractor ____ years.

7. a. Furnish the following information concerning the owner, partners, officers and directors:

Name	Title	Percent of Business Owned	Years of Business Experience	
			Contracting	Other

- b. Attach resumes of these key personnel as well as the on-site project manager(s) and superintendent(s), and specifically identify the following:

- Present position, responsibility, and length of employment.
- Amount and type of construction experience.
- Amount and type of highway construction experience, including position, responsibility, and a brief project description of each period of employment.
- Formal education and training, professional or technical registrations or licenses.

8. a. Contracts in force. (Attach additional sheets if necessary)

Project Name and Contract Numbers	Owner's Name, Address, and Contact Name and Telephone #	Scope of Work Performed	Contract Amount	Estimated Completion Date	Name of Surety

- b. Are there any unresolved claims or lawsuits associated with these projects? If so, state the amount in dispute, parties involved, nature and circumstances of the dispute, and status of the matter on a separate sheet.

9.a. List at least five of the largest jobs the Prime Contract has completed in the last five years which are similar in project work scope to this project. (Attach additional sheets if necessary)

Project Name and Contract Numbers	Owner's Name, Address, Contact Name and Telephone #	Scope of Work Performed	Original and Final Contract Amounts	Original and Final Completion Dates	Names of On-site Project Manager and Superintendent	Name of Surety

b. Are there any unresolved claims or lawsuits associated with these projects? If so, state the amount in dispute, parties involved, nature and circumstances of the dispute, and status of the matter on a separate sheet.

FEDERAL ACQUISITION REGULATIONSOLICITATION PROVISIONSInstructions to Bidders**52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FEB 1998)**

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also the full text of a solicitation provision may be accessed electronically at this address: <http://www.arnet.gov/far/>.

(End of Provision)

- 52.211-6 BRAND NAME OR EQUAL (AUG 1999)
- 52.214-3 AMENDMENTS TO INVITATIONS FOR BIDS (DEC 1989)
- 52.214-4 FALSE STATEMENTS IN BIDS (APR 1984)
- 52.214-5 SUBMISSION OF BIDS (MAR 1997)
- 52.214-6 EXPLANATION TO PROSPECTIVE BIDDERS (APR 1984)
- 52.214-7 LATE SUBMISSIONS, MODIFICATIONS, AND WITHDRAWALS OF BIDS
(NOV 1999)
- 52.214-18 PREPARATION OF BIDS - CONSTRUCTION (APR 1984)
- 52.214-19 CONTRACT AWARD - SEALED BIDDING - CONSTRUCTION (AUG 1996)
- 52.214-34 SUBMISSION OF OFFERS IN THE ENGLISH LANGUAGE (APR 1991)
- 52.214-35 SUBMISSION OF OFFERS IN U.S. CURRENCY (APR 1991)
- 52.236-27 SITE VISIT (CONSTRUCTION) (FEB 1995)

**52.211-4 AVAILABILITY FOR EXAMINATION OF SPECIFICATIONS NOT
LISTED IN THE GSA INDEX OF FEDERAL SPECIFICATIONS, STANDARDS
AND COMMERCIAL ITEM DESCRIPTIONS (JUN 1988)**

Specifications cited in this solicitation which are not available for distribution may be examined at the following location:

Federal Highway Administration
Central Federal Lands Highway Division
12300 West Dakota Avenue, Suite 360
Lakewood, Colorado 80228
Contact: Tiffany Atchison @ (720) 963-3354 or Brenda McGehee @ (720) 963-3353

(End of Provision)

52.216-1 TYPE OF CONTRACT (APR 1984)

The Government contemplates award of a firm-fixed price contract resulting from this solicitation.

(End of Provision)

**52.222-23 NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE
EQUAL EMPLOYMENT OPPORTUNITY (FEB 1999)**

(a) The offeror's attention is called to the Equal Opportunity clause and the Affirmative Action Compliance Requirements for Construction clause of this solicitation.

(b) The goals for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Goals for minority participation for each trade	Goals for female participation for each trade
4.4%	6.9%

These goals are applicable to all the Contractor's construction work performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, the Contractor shall apply the goals established for the geographical area where the work is actually performed. Goals are published periodically in the Federal Register in notice form, and these notices may be obtained from any Office of Federal Contract Compliance Programs office.

(c) The Contractor's compliance with Executive Order 11246, as amended, and the regulations in 41 CFR 60-4 shall be based on (1) its implementation of the Equal Opportunity clause, (2) specific affirmative action obligations required by the clause entitled "Affirmative Action Compliance Requirements for Construction," and (3) its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade. The Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor, or from project to project, for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, Executive Order 11246, as amended, and the regulations in 41 CFR 60-4. Compliance with the goals will be measured against the total work hours performed.

(d) The Contractor shall provide written notification to the Deputy Assistant Secretary for Federal Contract Compliance, U.S. Department of Labor, within 10 working days following award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the -

- (1) Name, address, and telephone number of the subcontractor;
- (2) Employer's identification number of the subcontractor;
- (3) Estimated dollar amount of the subcontract;
- (4) Estimated starting and completion dates of the subcontract; and
- (5) Geographical area in which the subcontract is to be performed.

(e) As used in this Notice, and in any contract resulting from this solicitation, the "covered area" is McKenzie County, North Dakota.

(End of Provision)

**52.225-10 NOTICE OF BUY AMERICAN ACT REQUIREMENT --
CONSTRUCTION MATERIALS (MAY 2002)**

(a) Definitions. "Construction material," "domestic construction material," and "foreign construction material," as used in this provision, are defined in the clause of this solicitation entitled "Buy American Act --Construction Materials" (Federal Acquisition Regulation (FAR) clause 52.225-9).

(b) Requests for determinations of inapplicability. An offeror requesting a determination regarding the inapplicability of the Buy American Act should submit the request to the Contracting Officer in time to allow a determination before submission of offers. The offeror shall include the information and applicable supporting data required by paragraphs (c) and (d) of the clause at FAR 52.225-9 in the request. If an offeror has not requested a determination regarding the inapplicability of the Buy American Act before submitting its offer, or has not received a response to a previous request, the offeror shall include the information and supporting data in the offer.

(c) Evaluation of offers. (1) The Government will evaluate an offer requesting exception to the requirements of the Buy American Act, based on claimed unreasonable cost of domestic construction material, by adding to the offered price the appropriate percentage of the cost of such foreign construction material, as specified in paragraph (b)(3)(i) of the clause at FAR 52.225-9.

(2) If evaluation results in a tie between an offeror that requested the substitution of foreign construction material based on unreasonable cost and an offeror that did not request an exception, the Contracting Officer will award to the offeror that did not request an exception based on unreasonable cost.

(d) Alternate offers. (1) When an offer includes foreign construction material not listed by the Government in this solicitation in paragraph (b)(2) of the clause at FAR 52.225-9, the offeror also may submit an alternate offer based on use of equivalent domestic construction material.

(2) If an alternate offer is submitted, the offeror shall submit a separate Standard Form 1442 for the alternate offer, and a separate price comparison table prepared in accordance with paragraphs (c) and (d) of the clause at FAR 52.225-9 for the offer that is based on the use of any foreign construction material for which the Government has not yet determined an exception applies.

(3) If the Government determines that a particular exception requested in accordance with paragraph (c) of the clause at FAR 52.225-9 does not apply, the Government will evaluate only those offers based on use of the equivalent domestic construction material, and the offeror shall be required to furnish such domestic construction material. An offer based on use of the foreign construction material for which an exception was requested--

- (i) Will be rejected as nonresponsive if this acquisition is conducted by sealed bidding; or
- (ii) May be accepted if revised during negotiations.

(End of Provision)

52.228-1 BID GUARANTEE (SEP 1996)

(a) Failure to furnish a bid guarantee in the proper form and amount, by the time set for opening of bids, may be cause for rejection of the bid.

(b) The bidder shall furnish a bid guarantee in the form of a firm commitment, e.g., bid bond supported by good and sufficient surety or sureties acceptable to the Government, postal money order, certified check, cashier's check, irrevocable letter of credit, or, under Treasury Department regulations, certain bonds or notes of the United States. The Contracting Officer will return bid guarantees, other than bid bonds, (1) to unsuccessful bidders as soon as practicable after the opening of bids, and (2) to the successful bidder upon execution of contractual documents and bonds (including any necessary coinsurance or reinsurance agreements), as required by the bid as accepted.

(c) The amount of the bid guarantee shall be 20 percent of the bid price or \$3,000,000, whichever is less.

(d) If the successful bidder, upon acceptance of its bid by the Government within the period specified for acceptance, fails to execute all contractual documents or furnish executed bond(s) within 10 days after receipt of the forms by the bidder, the Contracting Officer may terminate the contract for default.

(e) In the event the contract is terminated for default, the bidder is liable for any cost of acquiring the work that exceeds the amount of its bid, and the bid guarantee is available to offset the difference.

(End of Provision)

52.233-2 SERVICE OF PROTEST (SEPT 2006)

(a) Protests, as defined in section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the Government Accountability Office (GAO), shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgment of receipt from:

Kevin R. Black, P.E.
Contract Development Engineer
Central Federal Lands Highway Division
12300 West Dakota Avenue, Suite 360
Lakewood, Colorado 80228

(b) The copy of any protest shall be received in the office designated above within one day of filing a protest with the GAO.

(End of Provision)

52.252-3 ALTERATIONS IN SOLICITATION

Portions of this solicitation are altered as follows: NONE.

(End of Provision)

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52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also the full text of a clause may be accessed electronically at this address:

<http://www.arnet.gov/far/>.

(End of Clause)

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**52.211-10 COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK
(APR 1984)--ALTERNATE I (APR 1984)**

The Contractor shall be required to (a) commence work under this contract within 10 calendar days after the date the Contractor receives the notice to proceed, (b) prosecute the work diligently, and (c) complete the entire work ready for use not later than (See Standard Form 1442). The time stated for completion shall include final cleanup of the premises.

The completion date is based on the assumption that the successful offeror will receive the notice to proceed no later than July 14, 2008. The completion date will be extended by the number of calendar days after the above date that the Contractor receives the notice to proceed, except to the extent that the delay in issuance of the notice to proceed results from the failure of the Contractor to execute the contract and give the required performance and payment bonds within the time specified in the offer.

(End of Clause)

52.211-12 LIQUIDATED DAMAGES - CONSTRUCTION (SEPT 2000)

(a) If the Contractor fails to complete the work within the time specified in the contract, the Contractor shall pay liquidated damages to the Government in the amount of (See FP-03, Subsection 108.01) for each calendar day of delay until the work is completed or accepted.

(b) If the Government terminates the Contractor's right to proceed, liquidated damages will continue to accrue until the work is completed. These liquidated damages are in addition to excess costs of repurchase under the Termination clause.

(End of Clause)

**52.222-39 NOTIFICATION OF EMPLOYEE RIGHTS CONCERNING
PAYMENT OF UNION DUES OR FEES (DEC 2004)**

(a) *Definition.* As used in this clause—

“United States” means the 50 States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, the U.S. Virgin Islands, and Wake Island.

(b) Except as provided in paragraph (e) of this clause, during the term of this contract, the Contractor shall post a notice, in the form of a poster, informing employees of their rights concerning union membership and payment of union dues and fees, in conspicuous places in and about all its plants and offices, including all places where notices to employees are customarily posted. The notice shall include the following information (except that the information pertaining to National Labor Relations Board shall not be included in notices posted in the plants or offices of carriers subject to the Railway Labor Act, as amended (45 U.S.C. 151-188)).

Notice to Employees

Under Federal law, employees cannot be required to join a union or maintain membership in a union in order to retain their jobs. Under certain conditions, the law permits a union and an employer to enter into a union-security agreement requiring employees to pay uniform periodic dues and initiation fees. However, employees who are not union members can object to the use of their payments for certain purposes and can only be required to pay their share of union costs relating to collective bargaining, contract administration, and grievance adjustment.

If you do not want to pay that portion of dues or fees used to support activities not related to collective bargaining, contract administration, or grievance adjustment, you are entitled to an appropriate reduction in your payment. If you believe that you have been required to pay dues or fees used in part to support activities not related to collective bargaining, contract administration, or grievance adjustment, you may be entitled to a refund and to an appropriate reduction in future payments.

For further information concerning your rights, you may wish to contact the National Labor Relations Board (NLRB) either at one of its Regional offices or at the following address or toll free number:

National Labor Relations Board
Division of Information
1099 14th Street, N.W.
Washington, DC 20570
1-866-667-6572
1-866-316-6572 (TTY)

To locate the nearest NLRB office, see NLRB's website at <http://www.nlr.gov>.

(c) The Contractor shall comply with all provisions of Executive Order 13201 of February 17, 2001, and related implementing regulations at 29 CFR part 470, and orders of the Secretary of Labor.

(d) In the event that the Contractor does not comply with any of the requirements set forth in paragraphs (b), (c), or (g), the Secretary may direct that this contract be cancelled, terminated, or suspended in whole or in part, and declare the Contractor ineligible for further Government contracts in accordance with procedures at 29 CFR part 470, Subpart B—Compliance Evaluations, Complaint Investigations and Enforcement Procedures. Such other sanctions or remedies may be imposed as are provided by 29 CFR part 470, which implements Executive Order 13201, or as are otherwise provided by law.

(e) The requirement to post the employee notice in paragraph (b) does not apply to—

(1) Contractors and subcontractors that employ fewer than 15 persons;

(2) Contractor establishments or construction work sites where no union has been formally recognized by the Contractor or certified as the exclusive bargaining representative of the Contractor's employees;

(3) Contractor establishments or construction work sites located in a jurisdiction named in the definition of the United States in which the law of that jurisdiction forbids enforcement of union-security agreements;

(4) Contractor facilities where upon the written request of the Contractor, the Department of Labor Deputy Assistant Secretary for Labor-Management Programs has waived the posting requirements with respect to any of the Contractor's facilities if the Deputy Assistant Secretary finds that the Contractor has demonstrated that—

(i) The facility is in all respects separate and distinct from activities of the Contractor related to the performance of a contract; and

(ii) Such a waiver will not interfere with or impede the effectuation of the Executive order; or

(5) Work outside the United States that does not involve the recruitment or employment of workers within the United States.

(f) The Department of Labor publishes the official employee notice in two variations; one for contractors covered by the Railway Labor Act and a second for all other contractors. The Contractor shall—

(1) Obtain the required employee notice poster from the Division of Interpretations and Standards, Office of Labor-Management Standards, U.S. Department of Labor, 200 Constitution Avenue, NW, Room N-5605, Washington, DC 20210, or from any field office of the Department's Office of Labor-Management Standards or Office of Federal Contract Compliance Programs;

(2) Download a copy of the poster from the Office of Labor-Management Standards website at [http:// www.olms.dol.gov](http://www.olms.dol.gov); or

(3) Reproduce and use exact duplicate copies of the Department of Labor's official poster.

(g) The Contractor shall include the substance of this clause in every subcontract or purchase order that exceeds the simplified acquisition threshold, entered into in connection with this contract, unless exempted by the Department of Labor Deputy Assistant Secretary for Labor-Management Programs on account of special circumstances in the national interest under authority of 29 CFR 470.3(c). For indefinite quantity subcontracts, the Contractor shall include the substance of this clause if the value of orders in any calendar year of the subcontract is expected to exceed the simplified acquisition threshold. Pursuant to 29 CFR part 470, Subpart B—Compliance Evaluations, Complaint Investigations and Enforcement Procedures, the Secretary of Labor may direct the Contractor to take such action in the enforcement of these regulations, including the imposition of sanctions for noncompliance with respect to any such subcontract or purchase order. If the Contractor becomes involved in litigation with a subcontractor or vendor, or is threatened with such involvement, as a result of such direction, the Contractor may request the United States, through the Secretary of Labor, to enter into such litigation to protect the interests of the United States.

(End of Clause)

52.225-9 -- Buy American Act--Construction Materials (Jan 2005)

(a) *Definitions.* As used in this clause--

“Component” means an article, material, or supply incorporated directly into a construction material.

“Construction material” means an article, material, or supply brought to the construction site by the Contractor or a subcontractor for incorporation into the building or work. The term also includes an item brought to the site preassembled from articles, materials, or supplies. However, emergency life safety systems, such as emergency lighting, fire alarm, and audio evacuation systems, that are discrete systems incorporated into a public building or work and that are produced as complete systems, are evaluated as a single and distinct construction material regardless of when or how the individual parts or components of those systems are delivered to the construction site. Materials purchased directly by the Government are supplies, not construction material.

“Cost of components” means--

(1) For components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the construction material (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or

(2) For components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the construction material.

“Domestic construction material” means--

(1) An unmanufactured construction material mined or produced in the United States; or

(2) A construction material manufactured in the United States, if the cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind for which nonavailability determinations have been made are treated as domestic.

“Foreign construction material” means a construction material other than a domestic construction material.

“United States” means the 50 States, the District of Columbia, and outlying areas.

(b) *Domestic preference.*

(1) This clause implements the Buy American Act (41 U.S.C. 10a-10d) by providing a preference for domestic construction material. The Contractor shall use only domestic construction material in performing this contract, except as provided in paragraphs (b)(2) and (b)(3) of this clause.

(2) This requirement does not apply to the construction material or components listed by the Government as follows: None

(3) The Contracting Officer may add other foreign construction material to the list in paragraph (b)(2) of this clause if the Government determines that

(i) The cost of domestic construction material would be unreasonable. The cost of a particular domestic construction material subject to the requirements of the Buy American Act is unreasonable when the cost of such material exceeds the cost of foreign material by more than 6 percent;

(ii) The application of the restriction of the Buy American Act to a particular construction material would be impracticable or inconsistent with the public interest; or

(iii) The construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality.

(c) *Request for determination of inapplicability of the Buy American Act.*

(1)

(i) Any Contractor request to use foreign construction material in accordance with paragraph (b)(3) of this clause shall include adequate information for Government evaluation of the request, including--

(A) A description of the foreign and domestic construction materials;

(B) Unit of measure;

(C) Quantity;

(D) Price;

(E) Time of delivery or availability;

(F) Location of the construction project;

(G) Name and address of the proposed supplier; and

(H) A detailed justification of the reason for use of foreign construction materials cited in accordance with paragraph (b)(3) of this clause.

(ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed price comparison table in the format in paragraph (d) of this clause.

(iii) The price of construction material shall include all delivery costs to the construction site and any applicable duty (whether or not a duty-free certificate may be issued).

(iv) Any Contractor request for a determination submitted after contract award shall explain why the Contractor could not reasonably foresee the need for such determination and could not have requested the determination before contract award. If the Contractor does not submit a satisfactory explanation, the Contracting Officer need not make a determination.

(2) If the Government determines after contract award that an exception to the Buy American Act applies and the Contracting Officer and the Contractor negotiate adequate consideration, the

Contracting Officer will modify the contract to allow use of the foreign construction material. However, when the basis for the exception is the unreasonable price of a domestic construction material, adequate consideration is not less than the differential established in paragraph (b)(3)(i) of this clause.

(3) Unless the Government determines that an exception to the Buy American Act applies, use of foreign construction material is noncompliant with the Buy American Act.

(d) *Data.* To permit evaluation of requests under paragraph (c) of this clause based on unreasonable cost, the Contractor shall include the following information and any applicable supporting data based on the survey of suppliers:

Foreign and Domestic Construction Materials Price Comparison

Construction material description	Unit of measure	Quantity	Price (dollars) *
<i>Item 1</i>			
Foreign construction material			
Domestic construction material			
<i>Item 2</i>			
Foreign construction material			
Domestic construction material			

[List name, address, telephone number, and contact for suppliers surveyed. Attach copy of response; if oral, attach summary.]

[Include other applicable supporting information.]

[*Include all delivery costs to the construction site and any applicable duty (whether or not a duty-free entry certificate is issued).]

(End of Clause)

52.236-4 PHYSICAL DATA (APR 1984)

Data and information furnished or referred to below is for the Contractor's information. The Government shall not be responsible for any interpretation of or conclusion drawn from the data or information by the Contractor.

(a) The indications of physical conditions on the drawings and in the specifications are the result of site investigations by ____*____.

(b) Weather conditions: Contact National Weather Service.

(c) Transportation facilities NA.

(d) ____*____.

* See continuation of Standard Form 1442.

(End of Clause)

52.252-4 ALTERATIONS IN CONTRACT (APR 1984)

Portions of this contract are altered as follows: NONE.

(End of Clause)

GENERAL DECISION: **ND20080002** 02/08/2008 ND2

Date: February 8, 2008

General Decision Number: **ND20080002** 02/08/2008

Superseded General Decision Number: ND20070002

State: North Dakota

Construction Type: Highway

Counties: North Dakota Statewide.

HIGHWAY CONSTRUCTION PROJECTS

Modification Number	Publication Date
0	02/08/2008

ELEC0714-002 10/01/2006

ADAMS, BILLINGS, BOTTINEAU, BOWMAN, BURKE, BURLIEGH, DIVIDE, DUNN, EMMONS, GOLDEN VALLEY, GRANT, HETTINGER, MCHENRY, MCKENZIE, MCLEAN, MERCER, MORTON, MOUNTRIAL, OLIVER, PIERCE, RENVILLE, ROLLETTE, SHERIDAN, SOIUX, SLOPE, STARK, WARD, & WILLIAMS COUNTIES:

	Rates	Fringes
ELECTRICIAN		
CABLE SPLICER.....	\$ 27.59	a+28%
ELECTRICIAN.....	\$ 24.83	a+28%

FOOTNOTE; a. \$4.75 per hour.

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LINE CONSTRUCTION:

	Rates	Fringes
Line Construction		
CABLE SPLICER.....	\$ 27.59	4.75+28%
GROUNDMAN.....	\$ 16.55	4.75+28%
LINE EQUIPMENT OPERATOR.....	\$ 24.83	4.75+28%
LINEMAN.....	\$ 27.59	4.75+28%

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BARNES, BENSON, CAVALIER, DICKEY, EDDY, FOSTER, GRAND FORKS, GRIGGS, KIDDER, LAMOURE, LOGAN, MCINTOSH, NELSON, PEMBINA, RAMSEY, RANSOM, RICHLAND, SARGENT, STEELE, STUTSMAN, TOWNER, TRAILL, WALSH, & WELLS COUNTIES:

	Rates	Fringes
ELECTRICIAN		
CABLE SPLICER.....	\$ 23.02	12%+7.18
ELECTRICIAN.....	\$ 21.92	12%+7.18

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	Rates	Fringes
Power equipment operators:		
GROUP 1.....	\$ 21.35	10.75
GROUP 2.....	\$ 20.45	10.75
GROUP 3.....	\$ 20.20	10.75
GROUP 4.....	\$ 20.05	10.75
GROUP 5.....	\$ 19.20	10.75
GROUP 6.....	\$ 17.90	10.75

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: All Cranes 60 tons and over, Cranes doing piling, sheeting, dragline/clam work, Derrick(Guy & Stiff), Gentry Crane Operator, Helicopter Operator, Mole Operator or Tunnel Mucking Machine, Power Shovel 3-1/2 CY. and over and Traveling Tower Crane.

GROUP 2: All Cranes 21 tons and up to 59 tons, Backhoe Operator 3 CY. and over, Creter Crane, Dredge Operator 12' and Over, Equipment Dispatcher, Finish Motor Grader, Front End Loader Operator 8 CY. and over, Master Mechanic (When supervising 5 or more Mechanics), Mon-o-rail Hoist Operator, Power Shovel up to and including 3-1/2 CY. and Tugboat.

GROUP 3: Cranes 20 tons and under, Asphalt Paving Machine Operator, Asphalt Plant Operator, Automated Grade Trimmer, Backhoe Operator 1 CY. up to and including 2-1/2 CY., Boom Truck Hydraulic (8 Tons & over), Cableway Operator, Concrete Batch Plant Operator(electronic or manual), Concrete Mixer Paving Machine Operator, Concrete Paver- Bridge Decks, Concrete Pump, Concrete Spreader Operator & Belt Placer, Crushing Plant Operator, Dozer Operator, Dredge Operator or Engineer 11' and under, Drill Rigs, Heavy Duty Rotary or Chum or Cable Drill, Front End Loader (3-1/2 CY. up to and including 7-1/2 CY.), Gravel Washing & Screening Plant Operator, Locomotive, all types, Mechanic or Welder(heavy duty), Motor Grade Operator, Pavement Breaker (Non-Hydro Hammer type, Pipeline Wrapping, Cleaning & Bending Machine Operator, Power Actuated Auger and Horizontal Boring Machine Operator 6' and over, Refrigeration Plant Engineer, Roto Milling Machine (Surface Planer) 43' & over, Scraper Operator, Slip Form Concrete Paving Operator, Tandem Pushed Quad 9 or similar, Tractor with Boom Attachment, Trenching Machine- 100 HP. and over.

GROUP 4: Articulated/Off Road Hauler, Asphalt Dump Person, Asphalt Paving Screed Operator, Backhoe - up to and including 1/2 CY., Console Board Operator, Distributor Operator (Bituminous), Forklift Operator, Front End Loader- 1-1/2 CY. up to and including 3 CY., Grade Person, Gravel Screening Plant Operator (not Crushing or Washing), Greaser, Lazer-Screed Operator, Longitudinal Float and Spray Operator, Motor Grade Operator-Hual Roads, Paving Breaker- Hydro Hammer Type, Pugmill Operator, Push Tractor, Roller, Steel & Rubber on Hot Mix Asphalt Paving, Rotomill Machine (Surface Planer), up to and including 42'', Sand and Chip Spreader, Self-propelled Sheepsfoot Packer with or without Blade attachment, Self-propelled Traveling Soil Stabilizer, Sheepsfoot Packer with Dozer attatchment- 100 HP and over, Shouldering Machine, Slip Form, Curb & Gutter Operator,Tamping Machine Operator, Tie Tamper and Ballast Machine, Trenching Machine Operator- 46 HP up to and including 99 HP, Truck Mechanic, Well Points, Tub Grinder.

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GROUP 5: Boom Truck- A- Frame or Hydraulic 2 tons up to and including 7 tons, Broom-Self propelled, Concrete Saw (Power Operated), Front End Loader Operator, less than 1-1/2 CY., Mobile Cement Mixer, Power Actuated Auger & Horizontal Boring Machine Operator up to and including 5", Roller, on other than Hot Mix Asphalt Paving, Oilers, Vibrating Packer Operator (Pad Type) Self-propelled, Water Spraying Equipment-Self Propelled.

GROUP 6: Brakeman or Switchman, Curb Machine Operator (Manuel), Dredge or Tugboat Deckhand, Drill Truck Gravel/Testing Operator, Form Trench Digger (Power), Gunit Operator Gunall, Paint Machine Striping Operator, Pick-up Sweeper, 1CY. & over Hopper Capacity, Scissor Jack-Self Propelled Platform Lift, Straw Mulcher and Blower, Stump Chipper Operator, Tractor Pulling Compaction or Aerating Equipment, Trenching Machine Operator- up to and including 45 HP.

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	Rates	Fringes
Electrician		
Cass County.....	\$ 14.72	3.40
CARPENTER.....	\$ 20.75	3.15
Cement Mason/Finisher.....	\$ 20.75	3.15
Laborers:		
GROUP 1:.....	\$ 13.65	
GROUP 2:.....	\$ 13.90	
GROUP 3:.....	\$ 14.05	
GROUP 4:.....	\$ 14.80	

LABORERS CLASSIFICATIONS

GROUP 1: General Construction Laborers: Sack Shaker (cement and mineral filler): Pipe Handler: Drill Runner Tender: Salamander Heater and Blower Tender, Light truck, Pickup Driver, Flaggers and Pilot Car Drivers.

GROUP 2: Semi Skilled Laborer: Bulk Cement Handler: Conduit Layer, Telephone or Electrical: Form Setter (pavement): Gas Electric or pneumatic tool operator: Chipping Hammer, Grinders and Paving Brakers (tamper-drit) Concrete Vibrator Operator: Chain Saw Operator: Concrete Saw Operator: Concrete Curing Man (not water): Bituminous worker (Shoveler, Dumper, Raker and Floated): Kettleman (bituminous or lead): Concrete Bucket Signlman: Power Buggy Operator: Brick and Mason Tender: Multiplate Pipelayer: Culvert Pipe Layers: Concrete Finishers Tender. Carpenters Tenders.

GROUP 3: Caisson Worker: Bottom Man (sanitary sewer, storm sewer water and gas liners): Concrete Mixer Operator (one bag capacity): Mortar Mixer.

GROUP 4: Pipe Layers (sanitary sewer, storm sewer, water and gas lines): Drill runner (includes Wagon Churn or Air Track) Powderman, Gunit and Sandblast, Nozzleman, Reinforcing Steel Setters/Tiers.

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	Rates	Fringes
TRUCK DRIVER		
Euclid Driver-Over 20 yards.	\$ 20.22	8.95
Single Axle Trucks.....	\$ 19.02	8.95
Tandem Tri/Axle Semi, Low		
Boy and Off Road Heavy		
Duty End Dumps-20 yards		
and under.....	\$ 19.45	8.95
Tandem TRI/Axle Truck.....	\$ 19.14	8.95

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

In the listing above, the "SU" designation means that rates listed under the identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
 Wage and Hour Division
 U.S. Department of Labor
 200 Constitution Avenue, N.W.
 Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

SPECIAL CONTRACT REQUIREMENTS

The following Special Contract Requirements amend and supplement the *Standard Specifications for Construction of Roads and Bridges, on Federal Highway Projects (FP-03) U.S. Customary Version*, U.S. Department of Transportation, Federal Highway Administration.

Section 101. – TERMS, FORMAT, AND DEFINITIONS**101.03 Abbreviations.**

(b) **SI symbols.** Add the following:

US Customary symbols.

A	— ampere	electric current
ac.	— acre	Area
BTU	— British Thermal Unit	Energy
cu. in. or in³	— cubic inches	Volume
cu. ft., cf, ft³ or CUFT	— cubic feet	Volume
cu. yd., cy, yd³ or CUYD	— cubic yards	Volume
D	— day	Time
deg. or °	— degree	plane angle
Fc	— foot-candles	luminous intensity
fl. oz.	— fluid ounces	Volume
ft. or '	— foot or feet	Length
gal. or GAL	— gallon	Volume
H	— Henry	Inductance
hr. or HR	— hour	Time
Hz	— hertz (s ⁻¹)	Frequency
in. or "	— inch or inches	Length
K	— kelvin	Temperature
lb or LB, lbs	— pound, pounds	Mass
Lbf	— pound-force	Force
lnft or LNFT	— linear foot	Length
mi.	— miles	Length
min. or m	— minute	Time
min. or '	— minute	plane angle
°F	— degrees Fahrenheit	Temperature
oz.	— ounces	Mass
Psi	— pounds/square inch	Pressure
Q	— cubic feet/second	flow rate
sec. or s	— second	Time
sec. or "	— second	plane angle
sq. in. or in²	— square inches	Area
sq. ft., sf, ft² or SQFT	— square feet	Area

sq. yd., sy, yd² or SQYD	—	square yards	Area
Sta.	—	station	Length
T	—	short ton (2000 lbs)	Mass
V	—	volt (W/A)	electric potential
W	—	watt (J/s)	Power
YD	—	yard or yards	Length
Ω	—	ohm V/A	electric resistance

Section 104. – CONTROL OF WORK

104.03 Specifications and Drawings. Add the following:

(c) As-built working drawings. Prepare and furnish as-built working drawings prior to final acceptance. The Government will provide one set of 11 x 17 inch contract drawings to be used exclusively for recording the as-built details of the project. Mark plans on title sheet “As-Built Plans”. Use red ink to record the information described below.

Note all additions or revisions to the location, character and dimensions of the prescribed work shown on the contract drawings. Location changes are to be shown in the same coordinate system used for the staking notes. Strikeout all details shown that are not applicable to the completed work. Check and initial all plan sheets that were incorporated into the completed work without change.

Retain the drawings at the project site and, as work progresses, continuously update them to reflect the as-built details. Submit a copy of the updated as-built drawings at least every 30 days to the CO for review for compliance with these specifications.

As a minimum, show the following information on the as-built drawings:

(1) Title Sheet

- (a) Name of contractor.
- (b) Name of Project Engineer.
- (c) Project completion date.
- (d) Revisions to project length.
- (e) Revisions to begin and end stations of project.
- (f) Revisions to index to sheets.
- (g) Strikeout any schedules or options not awarded.
- (h) A note stating “All work was constructed as designed unless otherwise noted.”

(2) Typical section(s)

- (a) Revisions in dimensions.
- (b) Revisions in materials.
- (c) Revisions in station ranges.
- (d) Revisions to begin and end stations of project, and length of project.
- (e) Revisions to station equations.

- (f) Revisions to slope ratio and curve widening tables.
- (g) Revisions to any notes.

(3) Summary of Quantities and Tabulation Sheets

- (a) Revisions to all quantities, locations, notes/remarks, including totals.
- (b) Strikeout unused pay items.
- (c) Revisions to application rates.
- (d) Revisions to location, type, end treatments, riprap, skew, on drainage summary.

(4) Control Sheets

- (a) Show any control that was removed, destroyed, established, according to subsections 107.02, paragraph 2; 152.02, paragraph 2; and 152.03.
- (b) Use a unique naming convention for newly established control points. Do not reuse CFL control point numbers.

(5) Plan and profile and layout sheets

- (a) Revisions to the alignment; grades, elevations and stationing of intersection PIs; station equations and superelevation.
- (b) Major changes in the construction limits; particularly changes requiring additional design, additional right of way, or contract modifications. (Show information on plan and profile, layout sheets, and right of way plans if applicable.).
- (c) Changes in permanent rights of way caused by acquisition during construction. (Show information on plan and profile, layout sheets, and right of way plans if applicable). In addition, annotate any construction completed according to agreements made with landowners during construction.
- (d) Revisions in location, type and grade of road approaches.
- (e) Revisions in locations of sub-excavation and roadway obliteration.
- (f) Location, type and elevation of all constructed or relocated utilities, aerial and underground. Location, type and elevation of utilities not previously or inaccurately mapped, but encountered during construction, indicated as “approximate” or “as mapped”. (Show information on plan and profile and layout sheets and utilities plans if applicable).
- (g) Location, size and type of underdrains.
- (h) Location, number and type of horizontal, lateral, trench and blanket drains.
- (i) Revisions to culvert diameter, length, type, stationing, skew, riprap and end treatments.
- (j) Length of culvert extension, skew, and offset from centerline to the ends of extended culverts.
- (k) Channel changes.
- (l) Location of monuments and permanent references replaced according to subsection 107.02.
- (m) Location, length and type of fencing.
- (n) Location, length, stationing and type of walls.
- (o) Location, length, stationing and end treatment of roadside design features, including, but not limited to, guardrail, guardwall, signs, fences, gates, etc.

- (p) Revisions in location of pavement markings.
- (q) Revisions to parking areas or turnouts location.
- (r) Revisions in location, type and length of curbs, sidewalks, and accessible ramps.
- (s) Revisions to any notes.
- (t) Revisions to permanent erosion control measures.

(6) Standards, Details, and Specials

Revisions to notes, dimensions, locations, and materials.

No direct payment will be made for preparing and furnishing as-built working drawings. A retention of 1/10th of 1% of payment due will be withheld from project pay estimates if the Contractor has not kept current the designated set of as-built plans. In addition, a retention of 1/10th of 1% of the contract amount paid to date will be withheld at the end of the project until the set of as-built plans has been submitted to and accepted by the Project Engineer. The final completed as-built working drawings must be submitted to and accepted by the Contracting Officer before final acceptance will be granted on the project.

Section 105. - CONTROL OF MATERIAL**105.01 Source of Supply and Quality Requirements. Add the following:**

Submit samples of materials for quality verification testing for materials required to conform to Sections 703, 704, and 705.

Materials containing petroleum-based solvents such as cutback asphalts and traffic paints may be restricted from use by local laws or ordinances in certain geographic areas. Upon presenting proof of such restrictions, alternate materials considered acceptable to the CO may be substituted for the materials specified in the contract.

Ship material directly from the source to Theodore Roosevelt National Park without intermediary storage or staging. Materials must also be transported and stored such that they will not acquire invasive non-native plant seeds from adjacent vegetation.

Non-native invasive plants, or noxious weeds, are species of plants that do not naturally occur in a particular area and have the potential to spread from their point of introduction into surrounding areas.

Obtain clearance or eradicate non-native plants by;

- (1) Provide certification by a county extension agent, agronomist, or other qualified invasive species expert that the source is free from exotic plants; or
- (2) Notify the CO at least 2 weeks before beginning operations or starting crushing to allow for investigation for exotic plants. If exotics are found, the CO will determine if the upper portion of the source will need to be stripped or sprayed with an

herbicide approved by the CO. If spraying is required, provide a licensed operator to spray according to applicable state regulations. Do not spray any herbicides until approved in writing by the CO. Spraying or stripping of material does not necessarily constitute approval of the material; or

- (3) If exotic plant clearance is not obtained, heat all material to 300 degrees Fahrenheit to ensure sterilization of any exotic plants before delivery of uncertified material. Do not stockpile the heated material outside the park boundaries prior to delivery. These requirements are waived if the contractor uses a source that meets the requirements stated in items (1) and (2) above.

105.02 Material Sources

(b) Contractor-located sources. Add the following to the end of the first paragraph:

For Contractor-located, non-commercial sources, secure environmental clearances according to Subsection 107.10.

105.04 Storing and Handling Material. Add the following after the third sentence of the second paragraph:

For Contractor-located, non-commercial staging, storing, and material handling areas, secure environmental clearances according to Subsection 107.10.

Add the following:

The Contractor may use half of the area of the Caprock Coulee Parking area and/ or the Mix Pit/ Maintenance Yard for staging areas or to stockpile materials prior to use. Once the roadway is closed, the Contractor may use the River Bend Overlook Parking area for a staging area or to stockpile materials prior to use. All equipment and material must remain on the paved portion of the parking areas.

Section 106. - ACCEPTANCE OF WORK

106.01 Conformity with Contract Requirements. Delete the text and substitute the following:

Follow the requirements of FAR Clause 52.246-12 Inspection of Construction.

References to standard test methods of AASHTO, ASTM, GSA, and other recognized standard authorities refer to the methods in effect on the date of solicitation for bids.

Perform all work to the lines, grades, cross-sections, dimensions, and processes or material requirements shown on the plans or specified in the contract.

Incorporate manufactured materials into the work according to the manufacturer's recommendations or to these specifications, whichever is more strict.

Plan dimensions and contract specification values are the values to be strived for and complied with as the design values from which any deviations are allowed. Perform work and provide material that is uniform in character and reasonably close to the prescribed value or within the specified tolerance range. The purpose of a tolerance range is to accommodate occasional minor variations from the median zone that are unavoidable for practical reasons.

When standard manufactured items are specified (such as fence, wire, plates, rolled shapes, pipe conduits, etc., that are identified by gauge, unit mass, section dimensions, etc.), the identification will be considered to be nominal masses or dimensions. Unless specific contract tolerances are noted, established manufacturing tolerances will be accepted.

The Government may inspect, sample, or test all work at any time before final acceptance of the project. When the Government tests work, copies of test reports are furnished to the Contractor upon request. Government tests may or may not be performed at the work site. If Contractor testing and inspection is verified by the Government, the Contractor's results may be used by the Government to evaluate work for acceptance. Do not rely on the availability of Government test results for process control.

Acceptable work conforming to the contract will be paid for at the contract unit bid price. Four methods of determining conformity and accepting work are described in Subsections 106.02 to 106.05 inclusive. The primary method of acceptance is specified in each Section of work. However, work may be rejected at any time it is found by any of the methods not to comply with the contract.

Remove and replace work that does not conform to the contract, or to prevailing industry standards where no specific contract requirements are noted, at no cost to the Government.

(a) Disputing Government test results. If the accuracy of Government test results is disputed, promptly inform the CO. If the dispute is unresolved after reasonable steps are taken to resolve the dispute, further evaluation may be obtained by written request. Include a narrative describing the dispute and a proposed resolution protocol that addresses the following:

- (1) Sampling method
- (2) Number of samples
- (3) Sample transport
- (4) Test procedures
- (5) Testing laboratories
- (6) Reporting
- (7) Estimated time and costs
- (8) Validation process

If the evaluation requires additional sampling or testing be performed, mutually agree with the Government on witnessing procedures and on sampling and testing by a third party laboratory. Use a third party laboratory accredited by the AASHTO accreditation program. Provide proof of the laboratory's accreditation for the test procedures to be used. Do not use the same laboratory that produced the disputed Government test results or that produced the test results used as a basis for the dispute.

The CO will review the proposed resolution protocol and may modify it before final approval and execution.

The Government will use the approved resolution protocol test results to determine the validity of the disputed testing. If the Government test results are validated, the Contractor will be responsible for all costs associated with developing and performing the resolution protocol. If the Government test results are not validated, the Government will be responsible for all costs associated with developing and performing the resolution protocol. If the validity of the Government test results cannot be determined, the Contractor and Government will equally share all costs associated with developing and carrying out the resolution protocol.

(b) Alternatives to removing and replacing non-conforming work. As an alternative to removal and replacement, the Contractor may submit a written request to:

- (1) Have the work accepted at a reduced price; or
- (2) Be given permission to perform corrective measures to bring the work into conformity.

The request must contain supporting rationale and documentation. Include references or data justifying the proposal based on an evaluation of test results, effect on service life, value of material or work, quality, aesthetics, and other tangible engineering basis. The CO will determine disposition of the nonconforming work.

Where sample/testing procedures make reference to AASHTO, ASTM, or other standards (designated as FLH T), the procedure as modified in the Materials Manual shall govern. Where the specifications make reference to AASHTO Test T11, "Procedure B - Washing Using a Wetting Agent" shall be the procedure followed.

Where the specifications make reference to AASHTO Test T310, "Direct Transmission Method of In-Place Nuclear Density and Moisture Content" shall be the procedure followed.

Reference to the Materials Manual means the Federal Lands Highway "Field Materials Manual, U.S. Department of Transportation, Federal Highway Administration," Publication No. FHWA-FL-91-002, dated March 1991, revised March 1994, and all amendments and supplements thereto. Copies are available from the Materials Engineer, Federal Highway Administration, Central Federal Lands Highway Division, Materials Branch, P.O. Box 25246, Denver, Colorado 80225-0246, Telephone: (720) 963-3537.

106.03 Certification. Add the following after the second paragraph:

See Table 106-3 for schedule for full or partial acceptance by material certification. Submit certification and sample of material for testing as required.

106.05 Statistical Evaluation of Work and Determination of Pay Factor (Value of Work).

(b) Acceptance. Delete the last sentence of the second paragraph and substitute the following:

If a lot is concluded or terminated with fewer than three samples, the samples will be combined with those of an adjacent lot. In the event there is no adjacent lot, the material will be accepted according to Subsection 106.04.

Table 106-2 Pay Factor.

The Pay Factor 1.03, category I row: Delete the value 84 in the n=9 column and substitute the value 94.

The Pay Factor 0.75, category II row: Delete the value 35 in the n=3 column and substitute the value 25.

Table 106-3 Schedule For Full or Partial Acceptance by Materials Certification. Add Table 106-3 following Table 106-2.**Table 106-3
Schedule For Full or Partial Acceptance by Materials Certification**

Section	Description	Material	Material Property Or Specification	Frequency	
				Certification	Sample
306	Dust Palliative	Magnesium Chloride, Emulsified Asphalt, Lignin Sulfonate, Calcium Chloride	As specified	1 per shipment	First shipment
308	Minor Crushed Aggregate	Crushed Aggregate	Source, Quality and Gradation	1 per source	1 per source
404 and 417	Minor Hot Asphalt Concrete, Minor Cold Asphalt Mix	Aggregate Asphalt Mix	Source quality, Gradation, Stability, and Grade	1 per mix	1 per source
634 and 635	Permanent Pavement Markings, Temporary Traffic Control	634.02 as applicable, 635 as applicable	As specified	1 per source	-----
701	Hydraulic Cement	Portland Cement, Blended Hydraulic Cement and Masonry Cement	AASHTO M 85, M 240, and ASTM C 91	1 per shipment	1 per 100 tons
702.01	Asphalt Material	Asphalt Cement	AASHTO M 20, M 226, MP 1 or as applicable	1 per shipment	1 per shipment
702.02	Asphalt Material	Cut-back Asphalt	AASHTO M 81 or M 82 as applicable	1 per shipment	1 per shipment
702.03	Asphalt Material	Emulsified Asphalt	AASHTO M 140 or M 208 as applicable	1 per shipment	1 per shipment
702.05	Asphalt Material	Asphalt Materials used for Damproofing and Waterproofing Concrete Surfaces	As specified for each type of asphalt material	1 per shipment	-----
702.06	Recycling Agent	As specified	As applicable	1 per shipment	1 per shipment
702.08	Antistrip	As specified	As applicable	1 per shipment	-----
706	Concrete and Plastic Pipe	As specified	As applicable	1 per shipment	-----
707	Metal Pipe	Metal Pipe as specified	As applicable	1 per shipment	-----
708	Paint	As specified	As applicable	1 per batch\lot	1 sample for quantities > (25 gallons)

Section	Description	Material	Material Property Or Specification	Frequency	
				Certification	Sample
709	Reinforcing Steel and Wire Rope	As specified	As applicable	1 per shipment	For 709.01 & 709.03 submit 3, 1-yard bars of each size and grade of bar furnished. 709.02 submit 1 6-foot length for each size furnished
710	Fence and Guardrail	As specified	As applicable	1 per shipment	-----
711	Concrete Curing Material and Admixtures	As specified	As applicable	1 per material source per material type	-----
712	Joint Material (all)	As specified	As applicable	1 per shipment	-----
713	Roadside Improvement Materials (all)	As specified	As applicable	1 per shipment	-----
714	Geotextile and Geocomposite Drain	As specified	As applicable	1 per shipment	1 per project per type
715	Piling	As specified	As applicable	1 per shipment	-----
716	Material for Timber Structures	Timber and Hardware	As applicable	1 per shipment	-----
717	Structural Metal	As specified	As applicable	1 per shipment	717.01(e) minimum 6 per shipment for each size used. 717.10 1 per project
718	Traffic Signing and Marking (all)	As specified	As applicable	1 per shipment	-----
720	Structural Wall and Stabilized Materials (all)	As specified	As applicable	1 per shipment per material type	-----
721	Electrical and Illumination Material (all)	As specified	As applicable	1 per shipment per material type	-----
722	Anchor Material	As specified	As applicable	1 per shipment per material type	-----
725	Miscellaneous materials	As specified	As applicable	1 per shipment per material type	-----

Section 107. - LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

107.02 Protection and Restoration of Property and Landscape. Delete the sixth paragraph and substitute the following:

Before beginning work in an area, contact the local Utility Locator Service, at the phone number shown in the plans, to have all utilities located. Protect utilities from construction operations. Cooperate with utility owners to expedite the relocation or adjustment of their utilities to minimize interruption of service, duplication of work, and delays.

Add the following:

Restore all areas used as staging and/ or stockpiling areas to their pre-construction condition at no cost to the Government.

107.03 Bulletin Board. Add the following:

(g) “Beck” poster, according to FAR Clause 52.222-39 Notification of Employee Rights Concerning Payment of Union Dues or Fees.

107.10 Environmental Protection. Delete the text and substitute the following:

(a) Spills of Petroleum Products or Hazardous Materials. Properly clean up, mitigate, and remedy, if necessary, all spills of petroleum products, hazardous materials, or other chemical or biological products released from construction, fleet, or other support vehicles, or stationary sources. Respond in accordance with federal, state, and local regulations.

Immediately report to the CO any spill of petroleum products or a hazardous material. Report the spill to the appropriate federal, state, and local authorities, if the spill is a reportable quantity.

(b) Water pollution. Do not operate mechanized equipment or discharge or otherwise place any material within the wetted perimeter of any waters of the U.S. within the scope of the Clean Water Act (33 USC § 1251 et seq.). This includes wetlands unless authorized by a permit issued by the U.S. Army Corps of Engineers according to 33 USC § 1344, and, if required, by any State agency having jurisdiction over the discharge of material into the waters of the U.S. In the event of an unauthorized discharge:

- (1) Immediately prevent further contamination;
- (2) Immediately notify appropriate authorities; and
- (3) Mitigate damages as required.

Comply with the terms and conditions of any permits that are issued for the performance of work within the wetted perimeter of the waters of the U.S.

Separate work areas, including material sources, by the use of a dike or other suitable barrier that prevents sediment, petroleum products, chemicals, or other liquid or solid material from entering

the waters of the U.S. Use care in constructing and removing the barriers to avoid any discharge of material into, or the siltation of, the water. Remove and properly dispose of the sediment or other material collected by the barrier.

(c) Vehicles and equipment. All vehicles and equipment entering the project area must be clean of noxious weeds and free from oil leaks and are subject to inspection. Wash all construction equipment to thoroughly remove all dirt, plant, and other foreign material prior to entering the project. Particular attention must be shown to the under carriage and any surface where soil containing exotic seeds may exist. These efforts are critical to prevent the introduction and establishment of non-native plant species into the project area. Make arrangements for the CO to inspect each piece of equipment before entering the project. The CO will maintain records of inspections. Equipment found operating on the project that has not been inspected, or has oil leaks will be shut down and subject to citation.

In general, when gasoline, diesel fuel, antifreeze, hydraulic fluid or any other chemical contained within the vehicle is released to the pavement or ground, proper corrective, clean-up, and safety actions must be immediately implemented. All vehicles with load rating of 2 tons or greater should carry, at minimum, enough absorbent materials to effectively immobilize the total volume of fluids contained within the vehicle.

Repair oil leaks immediately on discovery. Do not use equipment that is leaking. Have oil pans and absorbent material in place prior to beginning repair work. Have the “on scene” capability of catching and absorbing leaks or spillages of petroleum products including antifreeze from breakdowns or repair actions with approved absorbent materials. Keep a supply of acceptable absorbent materials at the job site in the event of spills. Sand or soil are not approved absorbent materials.

Use oil pans and absorbent materials to prevent leaks, spills and draining petroleum fluids from falling onto bare ground and paved surfaces during servicing of equipment. Dig up soils contaminated with such fluids, place in appropriate safety containers, and dispose of according to state and/or federal regulations.

(d) Environmental Clearances.

(1) Contractor-Selected, Non-Commercial Areas. Contractor-selected, non-commercial areas include, but are not limited to, material sources, disposal sites, waste areas, haul roads, and staging areas. (A commercial source is a current operating concern, which has in the recent past provided same-type materials or services). These requirements do not apply for areas identified by the FHWA as having previously received clearance.

Prior to construction activities in Contractor-selected, non-commercial areas, provide the following to the CO and the FHWA Environmental Section (12300 West Dakota Avenue, Lakewood, CO 80228/Fax 720-963-3610):

(a) A report with documentation, according to the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation, to determine if prehistoric or historic buildings, structures, sites, objects, or districts listed or eligible for listing in the National Register of Historic Places (NRHP) are present and if they will be affected by the proposed activity. Include information identifying the location, total land area, and type of activity proposed. The FHWA will review this documentation. The FHWA will coordinate with the State Historic Preservation Officer (SHPO) and other parties, which will require the following time frames:

- (1) Coordination on a "no effect" determination may require 30 days or longer.
- (2) Coordination on eligibility and affects may require 45 days or longer.
- (3) Coordination on mitigation of adverse effects may require 60 days or longer.

(b) Written documentation that such activities will not affect any "Waters of the U.S." as defined by the U.S. Army Corps of Engineers. Provide documentation by an individual capable of performing wetland delineations according to the 1987 Corps of Engineers' manual. Documentation of effects to wetlands or other Waters of the U.S. will be submitted to the CO and to the FHWA Environmental section. If wetlands are affected, coordination with the Corps of Engineers may require 45 days or longer.

(c) Written documentation that such activities will not affect any species protected under the Endangered Species Act (ESA). Provide documentation prepared by a biological specialist. The written documentation will include a "no effect," a "may affect-is not likely to adversely affect," or a "may affect-is likely to adversely affect," determination according to Section 7 of the Endangered Species Act. Submit the documentation to the CO and the FHWA Environmental Section. If the determination is "may affect-is not likely to adversely affect" or "may affect-is likely to adversely affect," the FHWA will coordinate with the U.S. Fish and Wildlife Service (FWS), which will require the following time frames:

- (1) "May affect-is not likely to adversely affect" may require 45 days or longer.
- (2) "May affect-is likely to adversely affect" may require 150 days or longer.

Contract time will not be increased due to the submittal and approval process for the above three items.

107.11 Protection of Forests, Parks, and Public Lands. Add the following:

The following National Park Service fire prevention plan involving emergency curtailment of operations is in effect on this project. The CO will order the suspension of burning and other operations when directed to do so by the Forest Service. No adjustment in the contract completion date will be made for partial or total suspensions of burning operations.

The Contractor will take the following precautions:

1. **Smoking and Lunch Fires.** Smoking is prohibited except inside a building, developed

recreation site, vehicle, or while seated in an area at least three feet in diameter that is barren or cleared of all flammable materials. 36 CFR 261.52(d).

The building of camp, lunch, warming, and other fires within the project area and vicinity is prohibited, except at established campgrounds where fire grates are supplied.

2. **Spark Arrester and Mufflers.** Operating or using any internal combustion engine, on any timber, brush, or grass covered land, including trails and roads traversing such land, without a spark arrester, maintained in effective working order, meeting either (I) Department of Agriculture, Forest Service standard 5100, "SPARK ARRESTERS FOR INTERNAL COMBUSTION ENGINES," (current edition); or (II) the Society of Automotive Engineers (SAE) recommended practices J335, "MULTIPOSITION SMALL ENGINE EXHAUST SYSTEM FIRE IGNITION SUPPRESSION," (current revision) and J350, 36 CFR 261.52(j), is prohibited.

Passenger carrying vehicles, pickups, medium and large highway trucks (80,000 GVW) will be equipped with a factory designed muffler system which is specified for the make and model of the respective vehicle/truck or with a muffler system that is equivalent or that exceeds factory specifications.

Exhaust systems shall be properly installed and continually maintained in serviceable condition.

3. **Fire Extinguishers and Tools on Equipment.** While in use, each internal combustion engine including tractors, trucks, yarders, loaders, welders, generators, stationary engines, or comparable powered equipment shall be provided with at least the following:
 - (a) One fire extinguisher, at least 5# ABC with an Underwriters Laboratory (UL) rating of 3A-40BC, or greater.
 - (b) One shovel, sharp, size O or larger, round-pointed with an overall length of at least 48 inches.
 - (c) One axe, sharp, double bit 3-1/2#, or one sharp pulaski.

Extinguishers, shovels, axes, and pulaskis shall be mounted so as to be readily available from the ground. All tools shall be maintained in a serviceable condition.

4. **Power Saws.** Each gasoline engine power saw shall be provided with one chemical-pressurized fire extinguisher of not less than 8-ounce capacity by weight, and one size O or larger round-pointed shovel with an overall length of at least 48 inches. The extinguisher, and shovel shall be maintained in good working order. The extinguisher shall be with the power saw operator immediately available for use at all times. The extinguisher shall not be affixed to the saw. The shovel shall be readily available to the operator of the saw at all times. Having the shovel with the gas can used to refuel the saw may be considered “readily available” if not more than 200 feet from the saw. During periods of critical fire danger, the National Park Service may prescribe other precautionary measures.

Any fueling or refueling of a power saw shall be done in an area which has first been cleared of material which will carry fire. The power saw shall be moved at least 10 feet from the place of fueling or refueling before starting.

5. **Blasting and Welding.** Blasting is prohibited except by written agreement. Such written agreement shall set forth necessary fire prevention requirements.

Unless otherwise directed in writing by the National Park Service, all flammable material shall be cleared for 10 feet around any piece of equipment being welded. In addition, provide a fire extinguisher of a size and type designed to extinguish a fire in the flammable materials surrounding the spot being welded.

During Fire Precautionary periods, blasting shall be permitted as follows:

- A. When the predicted condition class reaches 3 (High), a watchman shall patrol the blasting area for at least one (1) hour following blasting. The watchman shall have available for immediate use a standard fire shovel and a five (5) gallon water filled backpack pump.
- B. When the predicted condition class reaches 4 (Very High), blasting shall be restricted to clear areas and terminated by 11 a.m. local time. The watchman requirements shall be as in item A above.
- C. All blasting operations shall be terminated when the predicted fire danger reaches EXTREME.

Gasoline and Oil Storage: Gasoline, oil, grease, or other highly flammable material shall be stored in a separate building (or on site where all flammable debris has been cleared away within a minimum radius of 25 feet). Mobile servicing units shall be equipped with a fire extinguisher of not less than a 2 quart capacity of a type approved by the UL for gasoline and oil fires.

Conform to the following requirements:

- (a) Do not camp within the Park.

- (b) Locate office, lab or other trailers only within the designated staging areas.
- (c) Do not feed or disturb wildlife.
- (d) Do not park or turn around on vegetation. Stay on bare gravel or pavement.

Section 108. - PROSECUTION AND PROGRESS

108.01 Commencement, Prosecution, and Completion of Work: Add the following:

Limit operations as follows:

Perform no work except to maintain traffic control devices, erosion control devices, the roadway driving surface, and to control dust during the listed Federal holidays and surrounding days:

- Memorial Day Weekend: 12:00 Noon Friday to 6:00 am Tuesday.
- Independence Day: 12:00 Noon July 3 to 6:00 am July 7.
- Labor Day Weekend: 12:00 Noon Friday to 6:00 am Tuesday.
- Thanksgiving: 12:00 Noon Wednesday to 6:00 am Monday.
- Christmas/New Years Holiday: 12:00 Noon December 23 to 6:00 am January 2.
If December 23 or January 1 falls on a Monday, do not work the adjacent weekend and do not work on December 23. If January 1 falls on a Friday, do not work the weekend.

The roadway may be closed to public traffic from Caprock Coulee West after Labor Day weekend until the end of the construction season. Weekend work (between 6:00 pm on Friday to 6:00 am on Monday) is only permitted after Labor Day.

Following Labor Day, schedule at least 2 non-work days out of every 14 calendar days. The selected non-work days do not need to be consecutive, but they must be scheduled. Provide at least 2 weeks notice before changing the scheduled days off.

Night work is permitted. The roadway may be closed to public traffic at night from 11:00 pm to 6:00 am. Provide access to NPS personnel and emergency vehicles at all times.

Add the following:

A Notice to Proceed must be issued before commencement of any work.

Section 109. - MEASUREMENT AND PAYMENT**109.02 Measurement Terms and Definitions.**

(m) Square yard. Delete the text and substitute the following:

(m) Square yard. 9 square feet. Measure on a plane parallel to the surface being measured. No deductions from the area computation will be made for individual fixtures having an area of 9 square feet or less. Do not measure overlaps.

109.08 Progress Payments.

(b) Closing date and invoice submittal date. Delete the last sentence and substitute the following:

Submit invoices to the designated billing office by the 7th day after the closing date. Invoices received by the designated billing office after the 16th day following the closing date will not be accepted for payment processing that month. Include late, unprocessed invoice submittals in the following month's invoice.

(e) Processing progress payment requests.

(1) Proper invoices. Delete the title and text and substitute the following:

(1) Invoices received by the 7th day following the closing date.

(a) Proper invoices. If the invoice meets the requirements of Subsection 109.08(c), and the quantities and unit prices shown on the Contractor's invoice agree with the corresponding quantities and unit prices shown on the Government's receiving report, the invoice will be paid.

(b) Defective invoices. If the invoice does not meet the requirements of Subsection 109.08(c), or if any of the quantities or unit prices shown on the Contractor's invoice exceed the corresponding quantities and unit prices shown on the Government's receiving report, the invoice will be deemed defective and the Contractor so notified according to FAR Clause 52.232-27(a)(2). Defective invoices will not be corrected by the Government and will be returned to the Contractor within 7 days after the Government's designated billing office receives the invoice.

Revise and resubmit returned invoices by the 18th day following the closing date. The CO will evaluate the revised invoice. If the invoice still does not meet the requirements of Subsection 109.08(c), the Contractor will be so notified according to FAR Clause 52.232-27(a)(2), and no progress payment will be made that month. Correct the deficiencies and resubmit the invoice the following month.

If the revised invoice meets the requirements of Subsection 109.08(c), but still had quantities or unit prices exceeding the corresponding quantities and unit prices shown on the Government's receiving report, the Government's data for that item or work will be used. The Contractor's invoice, as revised by the Government's receiving report, will be forwarded for processing by the 23rd day following the closing date. The Contractor will be notified by the 23rd day following the closing date of the reasons for any changes to the invoice.

(2) Defective invoices. Delete the title and text and substitute the following:

(2) Invoices received between the 8th and 16th day following the closing date.

(a) Proper invoices. If the invoice meets the requirements of Subsection 109.08(d), and the quantities and unit prices shown on the Contractor's invoice agree with the corresponding quantities and unit prices shown on the CO's receiving report, the invoice will be deemed proper and forwarded for processing within 7 days of receipt.

(b) Defective invoices. If the invoice does not meet the requirements of Subsection 109.08(d), the invoice will be deemed defective, the Contractor so notified according to FAR Clause 52.232-27(a)(2), and no progress payment will be made that month. Correct the deficiencies and resubmit the invoice the following month.

If the invoice meets the requirements of Subsection 109.08(d), but has quantities or unit prices exceeding the corresponding quantities and unit prices shown on the Government's receiving report, the Government's data for that item of work will be used. The Contractor's invoice, as revised by the Government's receiving report, will be forwarded for processing within 7 days of the Government's receipt of the invoice. The Contractor will be notified of the reasons for any changes to the invoice.

(f) Partial payments. Add the following after the first paragraph:

Partial payments for stockpiled manufactured material (aggregates) will be based on Contractor process control test results. If test results show the material to be out-of-specification, or in "reject" where statistical evaluation procedures are used, no payment for stockpiled materials will be made.

Section 152. - CONSTRUCTION SURVEY AND STAKING

Construction Requirements

152.02 General. Delete the first paragraph and substitute the following:

The Government will furnish to the Contractor one copy of each of the following information:

- 3D coordinates and offset distance from centerline for subgrade and surface course finishing stakes at 50-foot intervals and miscellaneous intermediate stations.

- Slope stake books containing centerline grade and slope staking information at 50-foot station intervals and miscellaneous intermediate stations.
- Computer listings containing: horizontal alignment, vertical alignment, earthwork quantities, and staking details showing superelevation template data and slope information.

The Government will provide files for downloading 3D data. Following is the information that will be provided electronically:

- 3D coordinates of control points.
- 3D coordinates of grade finishing stakes.
- 3D coordinates of slope stakes

The Government will perform the following:

- Establish basic survey control points for vertical and horizontal control of the project.

The Government will not provide slope stakes for the slope improvements near the Visitor's Center.

Add the following:

Furnish a practicable schedule of staking activities with the construction schedule submitted according to Section 155. Include the dates and sequence of staking requirements.

152.03 Survey and Staking Requirements.

(c) Slope stakes and references. Delete the first sentence and substitute the following:

Set slope stakes and references on both sides of centerline at the stations listed in the government provided slope stake books.

(f) Grade finishing stakes. Delete the third paragraph and substitute the following:

The maximum longitudinal spacing between stakes is 25 feet when the centerline curve radius is less than or equal to 250 feet. When the centerline curve radius is greater than 250 feet, the maximum longitudinal spacing between stakes is 50 feet. The maximum transverse spacing between stakes is 25 feet. Reset grade finishing stakes as many times as necessary to construct the subgrade and each aggregate course. Use brushes or guard stakes at each stake.

(g) Culverts. Delete the first paragraph and substitute the following:

Verify, in the field, the approximate location of each individual culvert with the CO prior to surveying, designing, and staking culverts. Use the “Guide for Designing and Staking Culvert in the Field”, dated January 9, 1996, issued by the U.S. Department of Transportation, Central Federal Lands Highway Division, Lakewood, CO, as a guide to the work in this section.

Perform the following:

(4) Add the following:

(a) For single skewed culverts, also submit a plotted field design cross-section, normal to roadway centerline, at each end section. Plot the offset and elevation of natural ground at the end section and at all proposed template break points between centerline and the end section. Ensure the template design embankment slope is not exceeded.

(b) For multiple skewed culverts, also submit a plotted field design cross-section, normal to roadway centerline, at the end sections (left and right) nearest to the shoulder. Plot the offset and elevation of natural ground at the end section and at all proposed template break points between centerline and the end section. Ensure the template design embankment slope is not exceeded.

(5) Add the following:

Plot at a scale of 1:100.

Add the following:

(8) When the field design has been approved, set culvert survey stakes, reference stakes, and stake inlet and outlet ditches to make the culvert, including end treatments (e.g., drop inlets) functional.

(9) Adjust slope stakes to provide for catch basins (and transitions into and out of catch basins) which correspond to the final culvert location and design. If the culvert was moved from location shown in the plans, review the slope stakes in the vicinity of the plan location and adjust the slope stakes to remove the planned catch basin.

(I) Miscellaneous survey and staking. Delete the text and substitute the following:

Perform all surveying, staking, recording of data, and calculations necessary for establishing the layout, control, and measurement required to construct the project. Perform the work in such a manner as to ensure the contract work is constructed in the proper location and to the required tolerances. Where staking increments are not identified, propose appropriate staking increments to the CO for acceptance.

Measurement

152.05 Delete the fourth paragraph and substitute the following:

Do not measure miscellaneous survey and staking.

152.05 Add the following:

Reestablishing missing Government-set control points and stakes will be measured under Special labor, Hired survey services when it is paid by the hour. No payment will be made for re-establishing missing control points or stakes after construction operations have begun.

Section 153. - CONTRACTOR QUALITY CONTROL**Construction Requirements****153.02 Contractor Quality Control Plan.****(a) Process control testing.** Add the following:

See Table 153-1 for schedule of minimum sampling and testing for process control. Where no minimums are specified, submit proposed tests to be performed and the proposed sampling and testing frequencies.

For aggregates and/or aggregate/asphalt mixtures accepted under Subsection 106.03, sample and test for conformity with the Certification a minimum of one time per pay item.

(b) Inspection/control procedures.**(3) Production phase.** Add the following:

(d) Inspect the work, materials or assemblies accepted under Subsection 106.03 to ensure that **all** the work and materials comply with contract requirements. Furnish the results of the work inspection, along with the product certification or commercial certification as applicable, to the CO prior to incorporating the materials into the work.

(c) Description of records. Add the following:

Identify the format for reporting test results, materials certifications and the procedures to be used to maintain inspection records.

(d) Personnel qualifications.**(1)** Add the following:

Designate a Quality Control Supervisor (QCS) whose primary responsibility is managing the inspection system. Designate a QCS who is experienced to perform and supervise all work inspection, sampling and testing. The QCS will monitor all phases of the work and identify deficiencies and take appropriate corrective action.

Add the following:

(3) Personnel assigned to sampling or testing will have 1 year or more of recent job experience in the type of sampling and testing required by the contract, and the following:

(a) NICET Level II certification in highway materials, or State (SHA) or industry certification-related sampling and testing equivalent to their intended responsibilities.

(b) WAQTC or other nationally accepted certification program for intended sampling and testing responsibilities.

or

(c) Current or previous employment by an AASHTO accredited laboratory performing sampling and testing equivalent to their intended responsibilities.

(d) Demonstrated proficiency or successful testing of one or more proficiency samples may be substituted for basic qualifications pending verification of test results.

153.03 Testing. Delete the title and text and substitute the following:

153.03 Sampling and Testing. Perform the work required by Table 153-1 and by the accepted Quality Control Plan.

(a) Acceptance sampling. Acceptance sampling schedules and times or locations will be provided by the CO. Use a procedure for random sampling. In addition, sample any material that appears defective or inconsistent with similar material being produced, unless such material is voluntarily removed and replaced or otherwise corrected.

(b) Testing. If the Government-furnished field laboratory option is not exercised by the CO, furnish a laboratory equipped with all test equipment necessary to satisfy the requirements of the contract. Ensure test equipment has been checked, calibrated, standardized and/or otherwise verified in accordance with AASHTO and ASTM standards by an individual qualified to do this work. Ensure mobile laboratories receive an equipment inspection after the laboratory has been moved to its permanent location on the project site and anytime it is moved thereafter. Inspect equipment within 45 days of actual use in project testing and at least once a year thereafter. Do not use equipment that has not been inspected or is found to be deficient. Mark deficient equipment and take it out-of-service until it is repaired or replaced and shown by subsequent inspection to perform as required. Maintain records documenting these inspections in the laboratory. Provide certification(s) stating the equipment conforms to testing requirements and provide evidence of current inspection.

The CO may require the Contractor to perform testing to demonstrate acceptable equipment and an acceptable level of technician competence. The CO may also check equipment and inspection records to verify condition. Repair or replace equipment not meeting applicable requirements. Keep laboratory facilities clean and maintain equipment in proper working condition. Provide the CO unrestricted access to the laboratory for inspection and review.

(c) Certifications. For materials accepted by certification in accordance with 106.03, review all certifications to insure compliance with the requirements of the contract prior to incorporating materials into the work and provide a signed copy of the reviewed certification(s) to the CO.

153.04 Records. Add the following to the first paragraph:

When tests are on material being incorporated into the work, report test results within the reporting times indicated in the sampling and testing requirements at the end of each section or as specified in the contract.

Add the following to the second paragraph:

Detailed inspection results including deficiencies observed and corrective actions taken.

153.05 Acceptance. Add the following:

If chronic deficiencies are noted in the Contractor's inspection or testing systems, the CO may order supplemental inspection and/or testing to be performed. The Government will charge to the Contractor all costs associated with such supplemental inspection or testing.

Table 153-1
Schedule of Minimum Sampling and Testing For Process Control
 (to be performed by the Contractor)

Section(s): 204, 208, 209.

Material	Property or Characteristic	Test Method or Specification	Frequency	Sampling Point
Embankment Construction Composition of Roadbed in Cuts	Classification and Moisture/Density	AASTHO M 145 AASHTO T 99 or AASHTO T 180 (minimum of 5 proctor points).	1 per material/type.	Source of material.
	In-place density and moisture content	AASHTO T 310	2 per lift, but not less than 2 every 1000 cubic yards.	Compacted embankment, subgrade as applicable.
	R-value	AASHTO T 190 (Tested by FHWA Central Lab).	1 per 2500 feet, or change in material type.	Sample depth: 0-12 inches.
Bedding/Backfill for Structures and Culvert Pipe	Classification and Moisture/Density	AASTHO M 145 AASHTO T 99 or AASHTO T 180 (minimum of 5 proctor points).	1 per material/type.	Source of material.
	In-place density and moisture content	AASHTO T 310	1 per 50 feet/lift. Minimum 2 per lift.	Compacted bedding or backfill as applicable.

Table 153-1
Schedule of Minimum Sampling and Testing For Process Control
 (to be performed by the Contractor)

Section(s): 255.

Material	Property or Characteristic	Test Method or Specification	Frequency	Sampling Point
Select wall backfill 704.13(a) and Wall backfill 704.13(b)	Gradation and liquid limit	AASHTO T 11 AASHTO T 27 AASHTO T 89 AASHTO T 90	1 per material/type	Source of material
	Moisture Density	AASHTO T99, Method C ⁽¹⁾	1 per material/type	Source of material
	In-place density and moisture content	AASHTO T 310	For MSE walls: 1 per 1-foot lift per 250-feet of wall length (minimum of 2 per lift)	Compacted backfill

⁽¹⁾ A minimum of 5 points are required for moisture density test.

Table 153-1
Schedule of Minimum Sampling and Testing For Process Control
 (to be performed by the Contractor)

Section(s): 301, 303, 304, 305, 306, 308.

Material	Property or Characteristic	Test Method or Specification	Frequency	Sampling Point
Subbase, Base Course Aggregate Stabilization and Aggregate Topsoil Courses	Gradation (301)	AASHTO T 11 AASHTO T 27	2 per day	Crusher belt
	Moisture/Density	AASHTO T 99 or AASHTO T 180 (minimum of 5 proctor points)	1 per source of material	Source of material
	In-place density and moisture content	AASHTO T 310 or ASTM D2950	2 per lift at 1000-foot intervals, alternating lanes	Compacted aggregate
	Plasticity index (aggregate surfacing only)	AASHTO T 90	2 per day	Crusher belt
	Gradation (304 materials processed in place)	AASHTO T 11 AASHTO T 27	1 per 1000 feet	Processed material
Magnesium Chloride and Calcium Chloride	Specific Gravity	Hydrometer	1 per shipment	Transport vehicle

Note: Density and Moisture calculations AASHTO T 310...Density corrections based on moisture for recycled materials containing asphalts, or aggregates containing MgCl or CaCl will be made based on samples taken from each test site and oven-dried in the laboratory.

Table 153-1
Schedule of Minimum Sampling and Testing For Process Control
 (to be performed by the Contractor)

Section: 401.

Material	Property or Characteristic	Test Method or Specification	Frequency	Sampling Point
Superpave Hot Asphalt Concrete Pavement	Gradation	AASTHO T 11 AASHTO T 27	2 per day per stockpile	Crusher belt (during production) and Cold Feed or Hot Bins (as applicable during production of hot mix)
	Moisture content of aggregates	AASHTO T 255	1 per day	Cold Feed (during production of hot mix)
	Compaction	ASTM D2950	Test strip, first day of production to establish roller pattern: 12 per 1500 feet, then 3 per 1500 feet	In place, after compaction
	Placement temperature	Thermometer	As directed	Behind laydown machine
	Surface tolerance	Straight edge and FLH T 504	During and after compaction	See Subsection 401.16
Aggregate	Fine aggregate angularity	AASHTO T 304, Method A	1 per day	Cold Feed

Table 153-1
Schedule of Minimum Sampling and Testing For Process Control
 (to be performed by the Contractor)

Section(s): 402, 403, 404, 405, 408.

Material	Property or Characteristic	Test Method or Specification	Frequency	Sampling Point
Asphalt Concrete Pavement	Gradation	AASTHO T 11 AASHTO T 27	2 per day per stockpile	Crusher belt (during production) and Cold Feed or Hot Bins (as applicable during production of hot mix)
Open-Graded Asphalt Friction Course	Moisture content of aggregates	AASHTO T 255	1 per day	Cold Feed (during production of hot mix)
Asphalt Base Course	Compaction	ASTM D2950	Test strip, first day of production to establish roller pattern: 12 per 1500 feet, then 3 per 1500 feet	In place, after compaction
	Placement temperature	Thermometer	As directed	Behind laydown machine
	Surface tolerance	Straight edge and FLH T 504	During and after compaction	See Subsection 401.16

Table 153-1
Schedule of Minimum Sampling and Testing For Process Control
 (to be performed by the Contractor)

Section(s): 409, 410.

Material	Property or Characteristic	Test Method or Specification	Frequency	Sampling Point
Chip seal aggregate	Gradation	AASHTO T 11 AASHTO T 27	2 per day	Production belt or spreader discharge
Slurry seal aggregate	Moisture content of aggregates	AASHTO T 255	1 per day	Stockpile or spreader discharge
Asphalt binder Emulsified asphalt	Placement temperature	Thermometer	Prior to each days production, followed by 2 each day	Distributor truck

Table 153-1
Schedule of Minimum Sampling and Testing For Process Control
 (to be performed by the Contractor)

Section(s): 416, 418.

Material	Property or Characteristic	Test Method or Specification	Frequency	Sampling Point
Continuous Cold Recycled Asphalt Base Course Foamed Asphalt Stabilized Base Course	Gradation	AASHTO T 27 (maximum size only)	1 per 1500 feet	Recycled material prior to compaction
	Moisture content	FLH T 515	Minimum 1 per 1500 feet alternating lanes (as necessary to comply with contract requirements)	In place after compaction and prior to compaction to determine total moisture.
	In-place density	ASTM D2950	1 per 1500 feet, alternating lanes (1 value will be equal to the mean of 3 in-place tests, and as necessary to comply with contract requirements)	In place after compaction

Note: Density and Moisture calculations ASTM D 2950...Density corrections based on moisture for recycled materials containing asphalts, or aggregates containing MgCl or CaCl will be made based on samples taken from each test site and oven-dried in the laboratory.

Table 153-1
Schedule of Minimum Sampling and Testing For Process Control
 (to be performed by the Contractor)

Section(s): 501, 552, 601.

Material	Property or Characteristic	Test Method or Specification	Frequency	Sampling Point
Concrete	Gradation and fineness modulus	AASTHO T 11 AASHTO T 27	1 per day	Aggregate, before batching
	Moisture	AASHTO T 255	1 per day/stockpile	Aggregate, before batching
	Slump	AASHTO T 119	1 per 30 cubic yards, minimum 1 per day	See note
	Air content	AASHTO T 152	1 per 30 cubic yards, minimum 1 per day	See note
	Unit weight	AASHTO T 121	1 per 30 cubic yards, minimum 1 per day	See note
	Temperature	Thermometer	1 per 30 cubic yards, minimum 1 per day	See note
	Making test specimens for compressive strength	AASHTO T 23	1 set per 30 cubic yards, minimum 1 set per day	At point of discharge

Note: If an extended set admixture is used for the sole purpose of extending discharge times, sampling and testing shall be performed by the Contractor at point of batching and discharge location to ensure compliance with Subsection 552.08.

Section 154. - CONTRACTOR SAMPLING AND TESTING**Construction Requirements****154.02 Sampling.** Add the following:

Perform the initial curing of all concrete test cylinders. Provide for transporting the cylinders to the FHWA-Central Federal Lands Highway's Laboratory unless other testing facilities are authorized by the CO.

Label each concrete mold with the name and number of the Project, the cylinder number, date molded, location of the sample, and the test age (i.e. – 7, 14, or 28 days). Label the mold after casting and the cylinder after stripping to ensure the sample can be identified throughout the entire curing process.

Provide the required cylinder molds.

154.03 Testing Add the following:

Where Process Control Sampling and Testing frequencies in Table 153-1 are identical to the Sampling and Testing Tables for all applicable work the Process Control Samples may be used for acceptance.

154.03B Field Laboratory (Contractor-Furnished). Furnish a laboratory equipped with all necessary test equipment and accessories to satisfy the testing required by the contract.

Sampling and testing services of commercial laboratory equipped with all necessary test equipment and accessories to satisfy the testing required by the contract may be used.

Use equipment that is calibrated and conforms to the applicable testing equipment associated with the testing requirements methods of the contract. Tag all necessary equipment indicating the date of last inspection, inspector, and calibration number.

The CO may check equipment to verify condition and calibration. Repair or replace equipment not meeting applicable requirements.

Maintain and submit documentation supporting the calibration of all necessary equipment prior to actual testing. Include the following:

- Description of the equipment calibrated or verified, including model number, serial number, or other acceptable identification.
- Identification of the individual performing the calibration or verification.
- Identification of the calibration or verification procedure used.
- The calibration number for each calibration.
- Date of calibration

Section 155. - SCHEDULES FOR CONSTRUCTION CONTRACTS**Construction Requirements****155.05 Written Narrative.** Add the following:

(j) List anticipated monthly and cumulative contract earnings (including, for schedule updates, any contract modifications) for each month from the beginning of construction operations through the completion of the work. Calculate and list each month's anticipated earnings through the close of business on the date provided by the CO as the cut-off date for monthly project pay estimates.

Section 156. - PUBLIC TRAFFIC**Construction Requirements****156.03 Accommodating Traffic During Work.** Delete the last two sentences of the first paragraph and substitute the following:

Submit situation-specific traffic control implementation drawings and alternate traffic control proposals according to Subsection 104.03 for acceptance at least 14 days before intended use.

156.04 Maintaining Roadways During Work.**(a)** Add the following:

Do not construct diversions outside of the clearing limits or use alternate route detours without the approval of the CO.

156.06 Limitations on Construction Operations.**(c)** Delete the first sentence and substitute the following:

For alternate one-way traffic control, provide a minimum lane width of 10 feet. For two-way traffic, provide a minimum roadway width of 22 feet.

(i) Delete the text and substitute the following:

If construction begins prior to the full road closure, limit construction caused delays to public traffic to a maximum of 30 minutes per passage through the project.

156.08 Traffic and Safety Supervisor.

Delete the first paragraph and substitute the following:

Provide a traffic and safety supervisor who is certified by the State highway agency or other acceptable certification program. Furnish the traffic safety supervisor's name, address, and 24-hour telephone number(s) at the preconstruction conference. At all times during the contract, including periods of suspensions and work stoppages, perform all of the following:

Section 157. - SOIL EROSION CONTROL**Construction Requirements**

157.03 General. Delete the second paragraph and substitute the following:

Standard erosion control devices are provided in the contract. Detail site-specific measures for controlling erosion and submit to the CO for acceptance prior to implementation. Provide working drawings and associated data that do not exceed 24 by 36 inches in size. Allow 7 days for acceptance of the drawings or a return for corrections. Include the following in the detailed design:

- (1) Address contractual requirements for storm water runoff permits, environmental commitments, and other permit requirements here or in Subsection 107.01 or 107.10.
- (2) Location of each proposed erosion control measure.
- (3) Type of each erosion control measure.
- (4) Quantities and estimated unit costs of proposed temporary erosion control devices to be implemented during construction.
- (5) A schedule detailing coordination of erosion control measures with the various construction operations or stages. Include the furnishing, installation, maintaining, and removing of temporary devices and the installation of permanent erosion control features.
- (6) A schedule outlining the proposed schedule of clearing and grubbing, excavation, embankment, and culvert operations such that the area of disturbed or erodible material is minimized. Schedule the work such that temporary and permanent erosion measures can be incorporated at the earliest practical time.

(7) Construction methods used in various items of work to minimize erosion.

Add the following:

At least 5 days prior to the preconstruction conference, designate in writing an Erosion Control Supervisor who is responsible for implementing the requirements of this Section. When temporary erosion control measures are required due to the Contractor's negligence, carelessness, or failure to install permanent controls as part of the work in a timely manner, provide temporary measures at no cost to the Government.

157.14 Acceptance. Add the following:

Soil erosion control will be evaluated under Subsection 106.02 based on the demonstrated ability of the erosion control measures to result in minimal soil erosion, sedimentation and/or siltation, and turbidity increases within or adjacent to the project limits.

Section 203. - REMOVAL OF STRUCTURES AND OBSTRUCTIONS

Construction Requirements

203.05 Disposing of Material.

(a) **Remove from Project.** Add the following:

Secure environmental clearances according to Subsection 107.10.

(b) **Burn.** Delete the text.

(c) **Bury.** Delete the text.

Section 204. - EXCAVATION AND EMBANKMENT

Description

204.01 Add the following:

This work also includes removing existing curb, paved ditch, pavement and base.

204.02 Definitions.

(c) **Conserved topsoil.** Delete the text and substitute the following: Excavated material conserved from the roadway excavation and embankment foundation areas that is free from toxic substances, hard soil, rock, clay, litter or other deleterious material, and is suitable for growth of grass or native vegetation. Topsoil refers to the uppermost soil horizon, approximately two to four inches deep or as specified by the CO. Deeper pockets of topsoil

may exist and should be conserved. Topsoil may include decayed organic and other materials capable of supporting vegetation.

Construction Requirements

204.05 Conserved Topsoil. Delete the first sentence and substitute the following:

Conserve topsoil from the roadway excavation and from embankment foundation areas to the extent and depth determined by the CO.

204.10 Embankment Construction. Add the following:

Removed asphalt, reduced to a maximum dimension of 3", may be incorporated in with the Unclassified Borrow on Segments 1, 2, and 3. Do not place asphalt within 2' of exposed surfaces. Do not place asphalt in embankment on slope improvements near Visitor's Center.

204.11 Compaction. Add the following:

(c) Delete the third paragraph and substitute the following:

Use compression-type or vibratory rollers. Compact each layer of material full width to at least 95 percent of the maximum density, except at the slope improvements near the Visitor's Center. At this location, compact each layer of material full width to at least 90 percent of the maximum density. Determine the in-place density and moisture content according to AASHTO T 310 or other approved test procedures. When required, use AASHTO T 224 to correct for coarse particles.

204.14 Disposal of Unsuitable or Excess Material. Add the following:

Secure environmental clearances according to Subsection 107.10.

Approximately 785 CUYD of the excavated material in Segments 1, 2 and/ or 3 is to be used for the slope improvements near the Visitor's Center. Another 1500 CUYD of this material is to be placed in the maintenance yard/ mix pit for future use (as directed by the CO). The remainder of the waste material generated on the project must be removed from the Park.

Measurement**204.16****(a) Roadway Excavation.**

(1) Include the following volumes in roadway excavation:

(e) Delete the text and substitute the following:

Conserved topsoil stripped from cuts.

(h) Delete the text and substitute the following:

Conserved material taken from stockpiles and used in Section 204 work except topsoil measured under Section 624. Only materials required to be conserved by the CO are eligible for measurement under this item.

(2) Do not include the following in roadway excavation: Add the following:

(m) Conserved topsoil stripped from fills.

(3) Delete the text.

(b) Unclassified borrow, select borrow, and select topping. Add the following:

(1) Do not measure the following for payment:

(a) Topsoil replacement under fill.

(c) Embankment Construction.

(2) Do not measure the following in for payment: Add the following:

(d) Topsoil replacement under fill.

Section 207. — EARTHWORK GEOTEXTILES

Delete the text of this section and add the following:

Description

207.01 This work consists of furnishing and placing a geotextile as a permeable separator, stabilizer, or permanent erosion control measure.

This work also consists of furnishing and placing a geogrid as a soil reinforcement element.

Geotextile types are designated as shown in Subsection 714.01.

Material

207.02 Conform to the following Subsection:

Geotextile	714.01
Geogrid	714.03

Construction Requirements

207.03 General. Submit test results to the CO verifying the proposed products meet the criteria as outlined in Section 714.

Where placing a geotextile on native ground, cut the trees and shrubs flush with the ground surface. Do not remove the topsoil and vegetation mat. Remove all sharp objects and large rocks. Fill depressions or holes with suitable material to provide a firm foundation.

Replace or repair all geotextile or geogrid that is torn, punctured, or muddy. Remove the damaged area and place a patch of the same type of geotextile or geogrid by overlapping 3 feet beyond the damaged area.

Furnish geogrid packaged in a sheathing or container suitable to protect the geogrid from damage due to ultraviolet light during storage and handling. Store, handle, protect, and haul all the materials in accordance with the manufacturer's specifications and as directed by the CO. Furnish geogrid that is visibly labeled with the name of the manufacturer, identification of the geogrid product, date of manufacture, lot number, length, width, and quantity.

207.04 Separation and Stabilization Applications. Where placing a geotextile on a subgrade, prepare the subgrade according to Subsections 204.13(c) and (d).

Place the geotextile smooth and free of tension, stress, or wrinkles. Fold or cut the geotextile to conform to curves. Overlap in the direction of construction. Overlap the geotextile a minimum of 2 feet at the ends and sides of adjoining sheets, or sew the geotextile joints according to the manufacturer's recommendations. Do not place longitudinal overlaps below anticipated wheel loads. Hold the geotextile in place with pins, staples, or piles of cover material.

End dump the cover material onto the geotextile from the edge of the geo-textile or from previously placed cover material. Do not operate equipment directly on the geotextile. Spread the end-dumped pile of cover material maintaining a minimum lift thickness of 12 inches. Compact the cover material with rubber-tired or nonvibratory smooth drum rollers. Avoid sudden stops, starts, or turns of the construction equipment. Fill all ruts from construction equipment with additional cover material. Do not regrade ruts with placement equipment.

Place subsequent lifts of cover material in the same manner. Vibratory compactors may be used for compacting subsequent lifts. If foundation failures occur, repair the damaged areas and revert to the use of nonvibratory compaction equipment.

207.05 Permanent Erosion Control Applications. Place and anchor the geotextile on an approved smooth-graded surface. For slope or wave protection, place the long dimension of the geotextile down the slope. For stream bank protection, place the long dimension of the geotextile parallel to the centerline of the channel.

Overlap the geotextile a minimum of 12 inches at the ends and sides of adjoining sheets or sew the geotextile joints according to the manufacturer's recommendations. Overlap the uphill or upstream sheet over the downhill or downstream sheet. Offset end joints of adjacent sheets a minimum of 5 feet. Pins may be used to hold the geotextile sheets in place.

Place aggregate, slope protection, or riprap on the geotextile starting at the toe of the slope and proceed upward. Place riprap onto the geotextile from a height of less than 12 inches. Place slope protection rock or aggregate backfill onto the geotextile and cover material in the same day.

207.06 Soil Reinforcement Applications. Install the geogrid reinforcement according to the manufacturer's recommendations. Place the geogrid reinforcement at the elevations and to the extent shown on the plans. Place the geogrid reinforcement in continuous longitudinal strips such that the principle strength (highest strength) axis is perpendicular to the slope or wall face. If unable to complete the required length with a single continuous length of geogrid, a joint may be made with the CO's approval. Overlap the geogrid a minimum of 2 feet at the ends and sides of adjoining sheets. Pull and hold taut joints in geogrid reinforcement during fill placement. Lay flat and pull taut the geogrid reinforcement prior to backfilling. After a layer of geogrid reinforcement has been placed, use suitable means, such as pins or small piles of soil, to hold the geogrid reinforcement in position until the subsequent layer of backfill can be placed. Do not operate track-mounted equipment on the geogrid reinforcement until at least 6 inches of soil has been placed over the geogrid. Keep equipment turning to a minimum to prevent displacement of embankment and damage to the geogrid reinforcement. If approved by the CO, rubber tired equipment may pass over the geogrid reinforcement at speeds less than 10 miles per hour. If during embankment placement waves, wrinkles, or slack develop in the geogrid, remove the embankment and pull geogrid taut to remove slack.

Place only that amount of geogrid reinforcement required for immediately pending work to prevent undue damage. During construction, the surface of the fill should be kept approximately horizontal. Place geogrid reinforcements within 3 inches of the design elevations and extend to the length as shown in the plans unless otherwise directed by the CO. Place biaxial geogrid reinforcement as shown on the plans or as directed by the CO. Place and compact embankment soils according to Subsections 204.10 and 204.11. Do not place sharp or angular rock and rock larger than 6 inches in diameter within 6 inches of the geogrid reinforcement. After the specified soil layer has been placed, install the next layer of geogrid reinforcement. Repeat the process for each subsequent layer until final grade is reached.

207.07 Acceptance. Material for earthwork geotextile will be evaluated under Subsections 106.02, 106.03, and 714.01. Material for the geogrid will be evaluated under Subsections 106.02, 106.03, and 714.03.

Earthwork geotextile installation will be evaluated under Subsections 106.02 and 106.04.

Measurement

207.08 Measure the Section 207 items listed in the bid schedule according to Subsection 109.02 and the following as applicable. Do not measure 2' overlap in geogrid for payment.

Payment

207.09 The accepted quantities will be paid at the contract price per unit of measurement for the Section 207 pay item listed in the bid schedule. Payment will be full compensation for the work prescribed in this Section. See Subsection 109.05.

Section 308. - Minor Crushed Aggregate

308.06 Acceptance Delete the second paragraph and substitute the following:

Construction of roadway aggregate courses will be evaluated under Subsections 106.02 and 106.04. Method 2 compaction will be evaluated under Section 106.04. Sample material from the windrow or roadbed after processing but prior to compaction at the frequency shown in Table 308-1. Submit samples to the CO for verification. Materials that do not meet the approved certification will be considered unacceptable and removed and replaced at the Contractor's expense

Delete Table 308-1 and substitute the following:

Table 308-1
Sampling and Testing Requirements

Material or Product	Type of Acceptance (Subsection)	Property or Characteristic	Test Methods or Specifications	Sampling Frequency	Point of Sampling	Split Sample	Reporting Time
Crushed aggregate ⁽¹⁾	Measured and tested for conformance (106.04)	Moisture-Density	AASHTO T180 Method D ⁽³⁾	1 for each aggregate supplied.	Production output or stockpile.	---	Before using in work
		Gradation ⁽²⁾	AASHTO T11 and T27	1 for each 1000 t.	From the windrow or roadbed after processing.	---	Before placing next layer
		In-place density and moisture content	AASHTO T310 or other approved procedures	1 for each 1000 t.	In-place completed compaction layer.	---	Before placing next layer

⁽¹⁾ Sampling and testing required for roadway aggregate.

⁽²⁾ Use only sieves indicated for the specified gradation.

⁽³⁾ Minimum of 5 points per proctor.

Section 404. - MINOR HOT ASPHALT CONCRETE**Table 404-1 Sampling and Testing Requirements.**

Add footnote (1) after Compaction in the “Property or Characteristic” column:

⁽¹⁾ When directed, verify density by taking core samples from the compacted pavement according to AASHTO T230 Method B. Fill and compact the sample holes with asphalt concrete mixture.

Section 409. - ASPHALT SURFACE TREATMENT**Construction Requirements**

409.10 Fog Seal. Add the following after the first sentence:

Unless otherwise noted on the plans, dilute the specified emulsion one part water to one part emulsified asphalt.

Measurement

409.14 Add the following:

Measure fog seal including water added for dilution.

Indicate a breakdown of total emulsion and water added on the load invoices supplied to the CO for payment.

Section 602. - CULVERTS AND DRAINS**Material**

602.02 Add the following:

Use concrete pipe for all proposed culverts.

Precast concrete units

725.11

Section 609. – CURB AND GUTTER**Description****609.01** Add the following:

This work also consists of constructing paved ditches contiguous to the traveled way.

Construction Requirements**609.03 General.** Add the following:

For asphalt paved ditches, form the bed parallel to the finished surface of the ditch.

609.06 Asphalt Concrete Curb. Add the following to the second paragraph:

Incorporate minimum 1 percent cement into the asphalt curb mixture.

Add the following Subsection:

609.08A Asphalt Paved Ditch. Perform the work according to Section 404. Before overlaying existing asphalt paved ditches, clean and seal the cracks according to Section 414. Compact according to Subsection 404.07(a). Compact according to Subsection 404.07(b), only if paved ditch cannot be rolled safely.

Measurement**609.10** Add the following:

No separate measurement will be made for the asphalt mixture included in asphalt curb or paved ditch.

Measure paved ditches by the square yard width horizontally to include total width.

Measure curb by the linear foot.

Section 614. - LEAN CONCRETE BACKFILL**Construction Requirements**

614.03 Composition of Mix. Delete Table 614-1 and substitute the following:

**Table 614-1
Composition of Lean Concrete Backfill**

Property	Specification
Cement content	94 lbs/yd ³ min.
Aggregate particle size	1 inch max.
Aggregate passing No. 200 sieve	10% max.
7-day compressive strength	220 psi max.

Section 617. - GUARDRAIL

617.05 Terminal Sections. Delete the third paragraph and substitute the following:

Use flared end terminals meeting Test Level 2. Submit drawings from the manufacturer for the terminal according to Subsection 104.03. Construct slopes behind terminal sections as shown in Standard 617-19. Staking data will not be provided for this work.

Measurement

617.10 Add the following:

Measure guardrail, regardless of the post length, by LNFT under item 61701-1400.

Measure grading to achieve 1:10 slopes behind the terminal sections as shown in Standard 617-19 under equipment hours.

Section 623. – GENERAL LABOR

Delete the text of this Section and substitute the following:

Description

623.01 This work consists of furnishing workers and hand tools for construction work, survey crews, and/or furnishing qualified personnel to perform technical work ordered by the CO and not otherwise provided for under the contract.

623.02 Workers and Equipment. Furnish competent workers and appropriate hand tools for the work.

Obtain approval of the length of a workday and workweek before beginning the work. Keep daily records of the number of hours worked. Submit the records along with certified copies of the payroll.

623.03 Surveying Services. Furnish personnel, equipment, and material that conform to the requirements of Subsection 152.01. Survey according to Section 152.

Survey and establish controls within the tolerances shown in Table 152-1, or within other tolerances as established by the CO.

Prepare field notes in an approved format. Furnish calculations. All field notes, supporting documentation, and calculations become the property of the Government upon completion of the work.

Perform all surveying, staking, recording of data and calculations necessary to construct slope improvements near the Visitor's Center.

623.04 Office Technical Services. Furnish qualified engineering personnel experienced in highway construction and design, capable of performing in a timely and accurate manner. Provide personnel with a minimum of NICET Level II certification in highway design and construction, or State (SHA) or industry certification-related design and construction equivalent to their intended responsibilities. Personnel with 2 years or more of recent job experience in the type of highway design and construction provided for under the contract may be used in lieu of certifications. Provide the names and relevant experience of all personnel. Furnish supporting tools and equipment (e.g., calculator, computer, and software, and appropriate and commonly-used drafting tools for the assigned task).

All calculations, notes, and supporting documentation become the property of the government upon completion of the work.

623.05 Acceptance. Additional surveying services will be evaluated under Section 152.

Hired technical services will be evaluated under Subsections 106.02 and 106.04

Measurement

623.06 Measure the Section 623 items listed in the bid schedule according to Subsection 109.02 and the following as applicable.

Round portions of an hour up to the nearest half hour. Measure time in excess of 40 hours per week at the same rate as the first 40 hours.

For surveying services, the minimum field survey crew is two persons. Measure surveying service by the crew hour. Do not measure time spent in making preparations, performing

calculations, plotting cross-sections and other data, and processing computer data, and other efforts necessary to successfully accomplish the ordered survey services.

Do not measure time for worker's transportation time to and from the project site.

Measure office technical services by the hour as ordered by the CO for performing calculations, plotting cross-sections and other data, and processing computer data.

Payment

623.07 The accepted quantities will be paid at the contract price per unit of measurement for the Section 623 pay item listed in the bid schedule. Payment will be full compensation for the work prescribed in this section. See Subsection 109.05.

Section 625. - TURF ESTABLISHMENT

Construction Requirements

625.03 Turf Establishment Seasons. Delete the first sentence and substitute the following:

Perform all seeding between August 15 and September 15, or after October 15, but prior to the first snow.

625.07 Seeding. Delete the text and substitute the following:

Apply seed by the following method:

Two Step Hydraulic Method.

Step 1. Use hydraulic-type equipment capable of providing a uniform application using water as a the carrying agent. Add 400 lbs. per acre of hydromulch consisting of either wood or grass cellulose fiber mulch as a tracer material to the water. Add the seed to the water slurry no more than 30 minutes before application. Seed, by hand, areas inaccessible to seeding equipment. Do not use seed that has become wet, moldy, or otherwise contaminated or damaged.

Step 2. Using the same equipment, make a second pass, applying mulch only at a rate of 1500 lbs. per acre.

625.08 Mulching. Delete the text.

Section 633. – PERMANENT TRAFFIC CONTROL**Construction Requirements****633.04 Supports.** Add the following:

Provide wood posts for all signs. Install posts according to Special 633-A of the plans. Paint all posts Manor Brown. Provide a 2' long sample to the CO for color approval prior to post installation.

633.05 Panels. Add the following:

Paint the backs of all Panels Manor Brown.

Section 634. - PERMANENT PAVEMENT MARKINGS**Construction Requirements****634.03 General.** Delete the last sentence of the first paragraph and substitute the following:

For simple curve widening locations (widening only on one side) shift the centerline striping location such that the centerline stripe is midway between the normal edge of shoulders. The shift from the staked centerline will be towards the widened lane one-half the total curve widening specified for the given station as shown in the plans.

Add the following:

The Contractor may use, upon approval, permanent pavement marking materials and layouts meeting current state approved standards that are practiced in the region of the project in lieu of contract requirements, if the state standards meet the requirements of the MUTCD. The material substituted must be equivalent to that required in the specifications. Obtain the CO's approval before incorporating into the work. When requesting approval, furnish to the CO the applicable state standards (specifications and drawings), manufacturer's name and address, supplier's certification indicating material is produced to state approved specifications, pricing data showing cost difference for labor and materials, and any other available information describing application and performance. When directed, submit samples for approval at the Contractor's expense. Within 14 days, the CO will inform the Contractor as to the acceptance of the request. The unit price for the contract item(s) will be reduced to reflect any cost savings.

Section 635. - TEMPORARY TRAFFIC CONTROL**635.07 Construction Signs.** Add the following to the end of the first paragraph:

Provide the same type of sheeting on all post-mounted construction signs that pertain to the project.

635.20 Temporary Signal System. Add the following to the first paragraph:

Furnish either new or used material for temporary traffic signal systems. Used material is subject to the CO's approval. Provide a traffic signal system that is a portable, self-contained, full size, battery operated, and solar rechargeable system, similar to the SQ3TS Solar "Boomer" system available from Horizon Signal Technologies (1-610-687-8975).

Ensure the system is composed of two traffic signal units and each signal unit includes a towable trailer, signal mast and horizontal mast arm (boom), two signal heads, six solar boards, and a battery case with charger.

The lower signal head shall contain the controller with conflict monitor. The system shall receive input power of +12 volts ± 2.0 volts $- 1.0$ volts from a bank of deep cycle marine style lead acid storage batteries with a storage capacity of 1560 ampere hours minimum at ambient temperature of 25 degrees Celsius. The maximum current drain from the battery will be 5 amperes. The time required for battery charging shall not exceed 72 hours.

The solar array shall contain a method for anti-theft and the run time on batteries only (autonomy) shall be a minimum of 14 days at 25 degrees Celsius. The solar array peak power output shall be 450 watts, typical at a peak voltage of 178 volts. The solar charging system shall incorporate an automatic charge controller to prevent overcharging of the battery bank and to disconnect the solar array during use of auxiliary battery charge.

The signal system shall operate with either automatic or manual programming. Programming features shall include:

- Traffic volume. Programmable from 30 cars per hour to 600 cars per hour in 10 car per hour increments for each phase.
- Speed Limit. Programmable from 10 mph to 50mph in 5mph increments.
- Average Speed. Programmable from 10 mph to 80% of speed limit in 1mph increments.
- Distance between lights. Programmable from 50 yard to 1480 yard in 10 yard increments.
- Red time. Programmable from 1 second to 250 seconds in 1 second increments for each phase.
- Green Time. Programmable from 3 seconds to 250 seconds in 1 second increments for each phase.
- Per day time splits. Programmable to include up to five different programs to accommodate changes in traffic volumes throughout the day.
- Standby modes. The signal system shall have the following standby modes that are programmable by the user:
 - a. Off – all lights are off
 - b. Blink yellow – the yellow light blinks at 60 times/minute.
 - c. Blink red – the red light blinks at 60 times/minute
 - d. Red – the red light is on continuously.

The systems should also have the following features:

- Battery time. After five hours of continuous operation on the same battery the system shall be capable of calculating the remaining time of usable battery voltage and display the same upon user program request in days and hours.
- Manual switch. Independent of the programming controls the system shall have a manual switch that has off, on, blink red, blink yellow, and manual functions.
- Program protection. The program shall not be affected or changed when the battery is changed.
- Redundancy. The system shall incorporate three redundant timing circuits and should abort to a blinking or continuous red if the three timing circuits are not in synchronization.
- Data Logger. The system shall have the capability of storing maintenance and failure history of the signal for the previous 3000 events. The data should be able to be stored for at least one year without the aid of external power.
- Clearance. The minimum clearance of the traffic light of 17 feet from the bottom of the green light to the ground surface. The light shall be capable of 180 degree swings so as to be able to position the trailers on the same side of the work zone.
- Wind. The system should be capable of surviving wind gusts of up to 80 mph without sand bagging or staking.
- Finishes. The signal head shall be a polycarbonate head approved under ITE specification "Vehicle Traffic Control Signal Heads." The signal base shall be that all metal parts are all chemically cleaned and primed with Polyamide epoxy primer.

Furnish a Manufacturer's Technical Representative (MTR) upon initial set up of the system. The MTR shall provide training for all contractor personnel. The training shall provide complete instruction into how to operate the signal system.

Measurement

635.26 Add the following:

Measure the temporary concrete barrier only once. Relocating the concrete barrier is subsidiary to item 63503-0400.

Section 636 – SIGNAL, LIGHTING, AND ELECTRICAL SYSTEMS

636.04 General. Add the following:

Provide a temporary signal system according to 635.20

Section 703 – AGGREGATE**703.03 Granular Backfill.** Delete the text and substitute the following:

Furnish granular backfill conforming to AASHTO M 6, except soundness test is not required.

Section 704. – SOIL**704.02 Bedding Material.** Delete the text and substitute the following:

- | | |
|--|--|
| (a) Maximum particle size | ½ inch or half the corrugation depth, whichever is smaller |
| (b) Material passing # 200 sieve, AASHTO T 27 and T 11 | 10% max. |

704.06 Unclassified Borrow. Delete line (a), and substitute the following:

- | | |
|---------------------------|----------|
| (a) Maximum particle size | 6 inches |
|---------------------------|----------|

Section 705. - ROCK**705.02 Riprap Rock.** Delete lines (a), (b), (c), (d), and substitute the following:

- | | |
|--|-------------|
| (a) Apparent specific gravity, AASHTO T 85 | 2.40 min. |
| (b) Absorption, AASHTO T 85 | 4.0% max. |
| (c) Los Angeles abrasion, AASHTO T 96 | 50% max. |
| (d) Gradation for the class specified | Table 705-1 |

Section 706. – CONCRETE AND PLASTIC PIPE**706.08 Plastic Pipe.** Delete the first paragraph and substitute the following:

Furnish perforated and nonperforated plastic pipe conforming to the following for the size and types specified. For watertight joints, conform to ASTM D 3212. For pipe culvert, furnish pipe conforming to types (a), (b), or (c) for the size specified.

(d) Corrugated polyethylene drainage tubing. Delete the title and text and substitute the following:

(d) Drainage pipe. Furnish polyethylene perforated or non-perforated corrugated plastic pipe conforming to AASHTO M 252. Furnish perforated or non-perforated polyvinyl chloride pipe with smooth interior, smooth or ribbed exterior conforming to AASHTO M 278, ASTM F 758, or ASTM F 949.

Section 713. – ROADSIDE IMPROVEMENT MATERIAL**713.03 Fertilizer.** Delete the last sentence and substitute the following:

Use Bio-Sol Mix or an approved equal conforming to the following specifications:

Use a sterilized, weed free, slow release fertilizer composed of 93% fungal biomass, 4% water, and 3% potassium-magnesia. The nutrient ratio of the fertilizer shall be as follows:

N-P-K = 6-1-3. Nitrogen 6%, Phosphorus 1%, Potassium 3%.

Organic Substance	70%
Carbon/Nitrogen Ratio	6:1
Nitrogen (total)	>6%
Nitrogen (water soluble)	<0.5%
Phosphorus (P ₂ O ₅)	1 to 2%
Potash (K ₂ O)	3 to 4%
pH level	5-6

Apply fertilizer at a rate of 1800 pounds per acre immediately after seeding.

713.04 Seed. Add the following:

Apply seed at a rate of 22 PLS pounds per acre conforming to the following seed mix components:

<u>Species</u>	<u>Variety</u>	<u>% of mix</u>	<u>PLS lbs/acre</u>
Slender wheatgrass	Pryor	15	4.0
Western wheat grass	Rodan or Rosana	30	9.0
Green needlegrass	LoDorm	25	5.0
Sideoats grama	Pierre	15	3.5
Blue grama	Bad River	15	0.7
		100%	22.2

If seed of the specified varieties is not available, local native harvest originating from South Dakota, North Dakota, northern Nebraska or south eastern Wyoming may be used.

713.05 Mulch. Delete the text and substitute the following:

Furnish mulch conforming to the following:

Moisture content = 7-13%

pH = 5.3-5.5

Organic Matter (oven dried basis) = 99.1-99.5%

Inorganic Ash (oven dried basis) = 0.5-0.9%

Water holding = 1,402%

A minimum of 50% of the fibers will be equal to or greater than 0.15 inch.

75% or more will be retained on a 28 mesh screen.

Use American Excelsior Excelsior or an approved equal.

713.12 Stabilizing Emulsion Tackifiers. Delete the text and substitute the following:

Furnish a commercially available product containing no solvents or other diluting agents toxic to plant life. Conform to the following:

Nonasphaltic Tackifier: Apply a non-toxic, biodegradable tackifier, such as Super Tack or an approved equal, at a minimum rate of 70 pounds per acre.

Use a tackifier that is a natural galactomannan (guar) based hydrocolloid treated with dispersant agents for easy field mixing. Apply tackifier per manufacturer's recommendations depending on machine capacity and during step 2 of the 2 step hydroseeding operation.

To ensure proper curing of the tackifier, apply only when the daytime temperature is above 50 degrees Fahrenheit and minimum temperatures do not fall below freezing. Do not apply tackifier to saturated wet soil, during rain, or high winds.

713.17 Temporary Rolled Erosion Control Products. Add the following:

Use Type 4, long-term erosion control blanket or open weave textile.

Section 714.--GEOTEXTILE AND GEOCOMPOSITE DRAIN MATERIAL**714.01(a) Physical requirements.** Add the following:

(7) Uniaxial Geogrid

Table 714-7

(8) Biaxial Geogrid

Table 714-7

The following is added after Subsection 714.02:

714.03 Geogrid. Furnish geogrid reinforcement with a regular network of integral connected polymer tensile elements having an aperture geometry and junction strength to sufficiently

permit significant mechanical interlock with the surrounding soil or rock. Provide geogrid with a structure dimensionally stable and able to retain its geometry under manufacture, transport, installation, ultraviolet degradation, and all forms of chemical and biological degradation encountered in the soil being reinforced.

(a) Physical requirements. Provide geogrids composed of fibers or ribs that are at least 85% by weight polyethelene, polypropylene or polyester. Form a network of fibers that will retain dimensional stability. Calculate long-term tensile strength “ T_{al} ” and pullout capacity of geogrids according to FHWA publication No. FHWA-NHI-00-043, entitled “Mechanically Stabilized Earth Walls and Reinforced Soil Slopes Design and Construction Guidelines.” The long-term tensile strength “ T_{al} ” must take into account reduction factors “RF” for creep (RF_{CR}), durability (RF_D), and installation damage (RF_{ID}) as defined in FHWA-00-043. Conform to the physical requirements in Table 714-7.

Table 714-7
Geogrid Physical Requirements

Property	Test Method	Minimum Acceptable Values	
		Uniaxial Geogrid	Biaxial Geogrid
Wide width tensile strength (ultimate), lb/ft	ASTM D 4595	3,000/1,000 ⁽¹⁾	1,100/1,100 ⁽¹⁾
Aperture size, inches	----- ---	0.5/0.5 ⁽¹⁾	0.5/0.5 ⁽¹⁾
Long Term Design Strength, lb/ft	GRI:GG4	1,000 ⁽²⁾	500 ⁽²⁾

(1) Machine Direction/Cross Machine Direction

(2) Principle strength (highest strength) direction

Identify, store, and handle geogrid according to ASTM D 4873-88 and manufacturer’s recommendations. Limit geogrid exposure to ultraviolet radiation to less than 10 days.

(b) Evaluation procedures. Geogrid will be evaluated under Subsection 106.03. Furnish to the CO three copies of a commercial certification that the geogrid supplied meets the respective index criteria, measured in full accordance with all test methods and standards set forth in these specifications. State on the commercial certification the name of the manufacturer, product name, style number, chemical composition of the filaments, ribs, or yarns, and other pertinent information to fully describe the geogrid. Attest the certification by a person having legal authority to bond the manufacturer. In case of dispute over validity of values, the CO can require the contractor to supply test data from an agency approved laboratory to support the certified values submitted. Also, include the calculation of the long term design strength, with assumed reduction factors.

When samples are required, remove a 3-foot long, full-width sample from beyond the first outer wrap of the roll. Label the sample with the lot and batch number, date of sampling, project number, item number, manufacturer, and product name.

Manufacturing Quality Control: The manufacturer is responsible for establishing and maintaining a quality control program to ensure compliance with the requirements of this specification.

Perform conformance testing as part of the manufacturing process, testing may vary for each type of product. Consider the Table 714-8 for applicable index tests as a minimum for an acceptable QA/QC program.

Table 714-8
Minimum Index Tests for QA/QC

Property	Test Method	Minimum Conformance Requirement
Specific Gravity (HDPE only)	ASTM D-1505	To be provided by the material supplier of specialty company
Wide Width Tensile	ASTM D-4595	
Melt Flow (HDPE and PP only)	ASTM D-1238	
Intrinsic Viscosity (PET only)	ASTM D-4603	
Carboxyl End Group (PET only)	ASTM D-2455	
Single Rib Tensile (geogrids)	GRI:GG1	

Section 718. - TRAFFIC SIGNING AND MARKING MATERIAL

718.14 Waterborne Traffic Paint.

(g) Daylight reflectance. (Without glass beads) Delete the text and substitute the following:

- | | |
|-------------------------|--|
| (1) White, ASTM E 1347 | 84% relative to magnesium oxide standard |
| (2) Yellow, ASTM E 1347 | 55% relative to magnesium oxide standard |